4 III VISION OF GENERAL DYNAMICS CORPORATION SAN DIF GO, CALIFORNIA

| SPEC. NO.: ZD- 22-003 | DATE: |
|--|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,481 DTD |
| CHANGE NO: 296 | MODEL: 22-2 (Convair "880") |
| Specification Administrat Seat to Interchangeabilit | ive Change (Addition of Observer's y List) |
| ORIGIN. Convair initiated. | |
| REASON FOR CHANGE: To clarify the int | ent of the specification. |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE |
| GUAR, WT. EMPTY OPER, WT. EMPTY | |
| 0 | O INCH LB. |
| EFFECT ON GUARANTEED PERFORMANCE: No | ne |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | SAL . |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPL ANE RECURRING- NON-RECURRING: TOTAL: |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| PY | |
| DATÉ: | 15.7 67 Sq. 1422 (A |

Delta Air Lines Inc. Change No. 296

Title: Specification Administrative Change (Addition of Observer's

Seat to Interchangeability List)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 125, Paragraph 3.23.1 EQUIPMENT INTERCHANGEABILITY:

Add the following item under "2. Interchangeability Without Alterations: "

"Observer's Seat Assembly"

A TIMESON OF GENERAL DYNAMICS CORPORATION SAN DICCO, CALIFORNIA

| SPEC NO.: 20-22-003 | | | DATE: | | | | |
|--|--|----------------------------------|--|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,480 DTD | | | | |
| CHANGE NO: 295A | | | MODEL: 22-2 (Convair "880") | | | | |
| TITLE Specifics of Airspe | ation Administrati eed Indicator) | ve Ch | nange (Revision to Part Number | | | | |
| ORIGIN: Convair: 1959 | initiated based on | Koll | lsman letter dated 22 December | | | | |
| REASON FOR CHANGE: PI | roduct improvement | , and | d revision to CCP No. 295. | | | | |
| EFFECT O | ON WEIGHT . | | EFFECT ON BALANCE * | | | | |
| JUAN, WT. EMPTY | OPER, WT. EMPTY | | | | | | |
| 0 | 0 | | O ^ INCH LB. | | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: None | | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPOS | SAL | J.H. A JENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTA | NCE: | | ANES AFFECTED: | | | | |
| SPECIAL PROVISIONS: | | RECURRING: NON-RECURRING: TOTAL. | | | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY= | | | | | | | |
| DATE: | | | Strange of the Artist A | | | | |

Delta Air Lines Inc. Change No. 295A

Page 1 of 2

Title: Specification Administrative Change (Revision to Part Number of Airspeed Indicator)

Origin: Convair initiated based on Kollsman letter dated 22 December 1959

Reason for Change: Product improvement, and revision to CCP No. 295.

Description of Change:

Page A-9, APPENDIX I-C, INSTRUMENTS AND RELATED EQUIPMENT:

Revise the below item under "Kollsman Integrated Instrument System" as follows:

| From: "2 | Indicator, Airspeed-Angle- of-Attack | Kollsman | A29297-10 plus range markings" |
|-----------------|---|---------------|-----------------------------------|
| <u>To</u> : "*2 | Indicator, Airspeed, Angle | e Kollsman | A32707-10-023 |
| **2 | Indicator, Airspeed, Angle | e Kollsman | B32707-10-023 |
| ***2 | Indicator, Airspeed, Angle | e Kollsman | B34627-10-023" |

Add the following to the bottom of Page A-9:

*Applicable to Airplanes 1 through 4.
**Applicable to Airplanes 5 through 9.
***Applicable to Airplanes 10 through 13.

Delta Air Lines Inc. Change No. 295A

Page 2 of 2

The following shall not appear in the specification language:

Appendix I-C of specification currently list the part number of subject instrument as "A29297-10 plus range markings".

Delta Letter, File 142, dated 29 February 1960 approved part number change of this instrument to "A32707-10-023".

The changes which revise the part number from "A32707-10-023" to "B32707-10-023" as outlined by Kollsman, are as follows:

- 1. New mounting of Synchrotel and induction motor; plates and posts are replaced with a casting (body mounting Synchrotel).
- 2. Added three bosses on casting (body airspeed mechanism) for mounting of body mounting Synchrotel. Added one boss for set screw to hold new adjustable pivot shaft for jewel in Synchrotel pinion.
- 3. New eccentric jewel shaft for sector on rocking shaft.
- 4. New in tallation adjustment for angle-of-attack section.
- 5. Redesign of Synchrotel with new slip rings and brushes.
- 6. Added slip clutch on induction motor shaft.
- 7. Added nylon bushing in front plate for shaft of angle-of-attack section.
- 8. New back plate for mounting of brush block.
- 9. Unit B34627-10-023 contains a new improved maximum allowable airspeed mechanism and an improved angle-of-attack servo mechanism.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

COMMERCIAL CHANGE PROPOSAL

| SPEC NO.: ZD-22-003 | | | DATE: | | |
|-----------------------------------|---|-----------------------------|---|---------------------|------------------|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10,479 | DTD | |
| CHANGE NO: 294 | | MODEL: 22-2 (Convair "880") | | | "880") |
| TITLE Specification Static System | on Administrative (em Selector Valve) | Change | (Revision to | o P/N of | |
| ORIGIN. Convair ini | tiated | | | | |
| REASON FOR CHANGE: | Product improvement | t | | | |
| EFFECT | ON WEIGHT * | | EFFE | CT ON BALAN | ICE . |
| GUAR. WT. EMPTY O | OPER. WT. EMPTY O | 0 | | INCH LB. | |
| EFFECT ON GUARANTEED | PERFORMANCE: | • | | | , |
| ACCEPTANCE OF THIS CH | LL BE ACCUMULATED AND A FUTURE CHANGE PROPOS HANGE IS DEPENDENT UPO THE FOLLOWING CHANGES: | SAL N | V | Simon NGINEERING | |
| LATEST DATE OF ACCEPTA | ANCE: | AIRPLA | ANES AFFECTED: | | |
| SPECIAL PROVISIONS: | RECURI NON-RE | | FECT ON PRICE PER AIRPLANE: CURRING: N-RECURRING: ITAL! | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GE | ENERAL DYNAM | ICS CORP. |
| BY: | | | | | |
| DATE: | - | | | ~e | - VATIGAD BIZERA |

Delta Air Lines Inc. Change No. 294

Title: Specification Administrative Change (Revision to P/N of

Static System Selector Valve)

Origin: Convair initiated

Reason for Change: Product improvement

Description of Change:

Page A-9 - INSTRUMENTS AND RELATED EQUIPMENT:

Revise the below item under "Kollsman Integrated Instrument System" as follows:

From: "2 Valve Static System Republic 5-1357-2"

Selector

To: 2 Valve, Static System Republic 1-2560-10"

Selector

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE: | | |
|--|---|-----------------|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,478 DTD | | | |
| CHANGE NO: 293 | | | MODEL: 22-2 (Convair "880") | | |
| TITLE: Specificat Strainer) | tion Administrativ Installation) | e Cha | nge (Clarification of Fuel | | |
| ORIGIN: Convair in | nitiated | | | | |
| RÉASON FOR CHANGE: | To clarify the in | tent | of the specification | | |
| EFFECT O | N WEIGHT * | | EFFECT ON BALANCE * | | |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | 100000 | | | |
| 0 | . 0 | | o INCH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | |
| | None | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL N | Bf Simons ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL. | ANES AFFECTED: | | |
| RECUI NON-R | | RECUR NON-RI | TON PRICE PER AIRPLANE; RING:ECURRING: | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | | |
| DATE: | | | TON PARILING TONING THE | | |

Delta Air Lines Inc. Change No. 293

Title: Specification Administrative Change (Clarification of

Fuel Strainer Installation)

Origin: Convair initiated

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 52, Paragraph 3.12.9.8 - STRAINERS AND FILTERS:

Revise the paragraph title and paragraph to read as follows:

"STRAINERS: An 8-10 mesh screen shall be installed at inlet of each jettison, boost and transfer pump".

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

COMMERCIAL CHANGE PROPOSAL

DATE:

SPEC NO.: ZD- 22-003 .

| CUSTOMER: Delta Air | Lines Inc. | М | CL 10, | 477 | DTD | |
|---|---|------------------|-------------------|---------|-------------|-------------------|
| CHANGE NO: 292 | | М | ODEL: | 22-2 | (Convair | "880") |
| TITLE: Specificati Directional | on Administrative (Arrows from Engine | Change e Flui | (Delet d Syste | e Colo | or Coding | and bing) |
| ORIGIN: Convair ini | tiated | | | | | |
| REASON FOR CHANGE: | General Electric st unnecessary. | tates 1 | that th | ese fe | eatures a | re |
| EFFECT | ON WEIGHT * | | | EFFECT | ON BALANC | E * |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | | | | |
| 0 | 0 | | | | 0 | INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOSA ANGE IS DEPENDENT UPON | 11 2 | House | | fefluse | |
| | | | | ENC | GINEERING A | PPROVAL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPLANE | ES AFFECT | red: | | |
| SPECIAL PROVISIONS: | R N | RECURRIN | ON PRICE I | | PLANE: | |
| ACCEPTED: | | CONVAIR, | A DIVISION | OF GENE | RAL DYNAMIC | S CORP. |
| ВҮ: | | | | | | |
| DATE: | | | | | 304 V | 61 1,s, , 6-1217A |

Delta Air Lines Inc. Change No. 292

Title: Specification Administrative Change (Delete Color Coding and

Directional Arrows from Engine Fluid System Hoses and Tubing)

Origin: Convair initiated

Reason for Change: General Electric states that these features are

unnecessary.

Description of Change:

Page 14, Paragraph 3.2.2.1 COLOR CODING:

Change the period at the end of first sentence to a comma, and add the following:

", except for fluid system hoses and tubing installed on engine by engine manufacturer."

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | DATE: |
|--|---|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,476 DTD |
| CHANGE NO: 291A | MODEL: 22-2 (Convair "880") |
| Specification Administrati and Temperature Selector I | ive Change (Revision to Shockmount Language) |
| ORIGIN Convair initiated | |
| REASON FOR CHANGE. To clarify the interest revision to CCP No. | ent of the specification, and . 291. |
| EFFECT ON WEIGHT | EFFECT ON BALANCE |
| GUAS, WT. EMPTY OPER, WT. EMPTY | |
| 0 | O INCH LB. |
| EFFECT ON GUARANTEED PERFORMANCE: | |
| None | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPO ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPOPRIOR ACCEPTANCE OF THE FOLLOWING CHANGES | DN DN |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: |
| SPECIAL PROVISIONS | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| BY: | |
| DATE | for value of hearts. |

Delta Air Lines Inc. Change No. 291A

Title: Specification Administrative Change (Revision to Shockmount

and Temperature Selector Language)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification, and

revision to CCP No. 291.

Description of Change:

Page 94, Paragraph 3.17.1.5 RADIO AND ELECTRONIC EQUIPMENT COMPARTMENT:

Revise the ninth sentence as follows:

From: "Non-deteriorating type metal shockmounts shall be used throughout and shall be readily removable from structure."

To: "Isolation shockmounts may be used throughout which shall be readily removable from structure."

Page 119, Paragraph 3.20.1.10.1 TEMPERATURE SELECTOR:

Revise the third sentence as follows:

From: "The temperature selector shall be graduated in ten increments."

To:

"Two temperature selectors shall be installed, one for the flight compartment and one for the passenger compartment. The selectors shall operate in a clockwise direction to increase temperature, and shall be divided into ten equal spaces from the nine o'clock position to the three o'clock position."

A DIFISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORMA

| SPEC NO.: ZD- 22-003 | | DATE: | | | | |
|--|------------------------------|--|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,572 DTD 11 April 1961 | | | | | |
| CHANGE NO: 290 | | MODEL: 22-2 (Convair "880") | | | | |
| TITLE Certification with Anti-Ski | d Syst | tem Inoperative | | | | |
| ORIGIN: TWA requested and Convair p | ropose | ed for Delta. | | | | |
| REASON FOR CHANGE: As above | | | | | | |
| | | | | | | |
| EFFECT ON WEIGHT | | EFFECT ON BALANCE * | | | | |
| GUAR. WT. EMPTY OPER. WT. EMPTY | | | | | | |
| 0 0 | | O INCH LB. | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: The shown in Flight Manual after | effectairp: | ct on performance will be lane is certified. | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE | | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | J. H. Sharp | | | | |
| | | ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPL | ANES AFFECTED: | | | | |
| | | ECT ON PRICE PER AIRPLANE: | | | | |
| | NON-RE | RRING:ECURRING: | | | | |
| ACCEPTED: | CONVA | MR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | | | | |
| DATE: | | CONVERTED ASSESSED | | | | |

CONVAIR: SD Delta Air Lines Change No. 290

Title: Certification with Anti-Skid System Inoperative

Origin: TWA requested and Convair proposed for Delta.

Reason for Change: As above

Description of Change:

Page 16, Add the following new paragraph to the page, after Paragraph 3.2.8.1:

"3.2.8.2 ANTI-SKID DEVICES: The airplane shall be certified for use with anti-skid devices inoperative. Such certified landing and takeoff distances may not equal guaranteed values."

Effect on Weight Empty: 0
Effect on Balance: 0

Effect on Performance: As noted on cover sheet.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEBO, CALIFORNIA

| FF NU. 20- 22-003 | | | VAIE: | | | |
|--|--------------------|-----------------|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,475 DTD | | | | |
| HANGEND: 289 | | | MODEL: 22-2 (Convair "880") | | | |
| Specificati | on Administrative | Chang | ge (Delete switch guard) | | | |
| Convair ini | tiated. | | | | | |
| REASON FOR CHANGE. T | o clarify the int | ent of | the specification. | | | |
| | | | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE | | | |
| L-JAC, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A | | | | | | |
| ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF TA | | | Im Copm | | | |
| | | | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED. | | | |
| RENC | | RECUR NON-RE | T ON PRICE PER AIRPLANE. RING: CURRING: : | | | |
| A CEPTED: | N/E | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| 87 | | | | | | |
| LATE | | | - 1919 | | | |

Delta Air Lines Inc. Change No. 289

Title: Specification Administrative Change (Delete switch guard)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 78, Paragraph 3.16.8.5.1 CONTROLS:

Delete the fifth sentence "(Both switches shall be protected by a guard.)"

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN OLLGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | 3 | | DATE: | | |
|--|--|-----------------|--|----------------------|-------------------|
| CUSTOMER: Delta | Air Lines Inc. | | MCL 10,502 | DTD 19 | January 196 |
| CHANGE NO: 288 | | | MODEL: 22-2 | (Convair | "880") |
| THILE. Control Sy | ystem, Electrical, | Modif | leation of | | |
| PEASON FOR CHANGE: | sted and Convair pr As above | ropose | d for Delta | | |
| EFFECT | T ON WEIGHT * | | EFFE | CT ON BALAN | ICE * |
| GUA , WT. EMPTY | OPER, WT. EMPTY | | | | |
| Megligible | Negligible | | Negligi | .ble | INCH LB. |
| FFECT ON GUARANTEED | PERFORMANCE: * | 9 | And the additional state of the | | |
| TOTALS REFLECTED IN ACCEPTANCE OF THIS C | VILL BE ACCUMULATED AND A FUTURE CHANGE PROPORTHANGE IS DEPENDENT UPOTHE FOLLOWING CHANGES | SAL | 78/E | 2 Lone NGINEERING | APPROVAL |
| LATEST DATE OF ACCEPT | TANCE: | AIRPL | ANES AFFECTED; | | |
| RECU NON-R | | RECUR NON-RI | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED. | | CONVA | IR, A DIVISION OF GE | NERAL DYNAM | ICS CORP. |
| ВҮ | | | | | |
| DATE: | | | | | (24) 25 - 14 - 15 |

Delta Air Lines Inc. Change No. 288

CONVAIR: SD

Control System, Electrical, Modification of Title:

Origin: TWA requested and Convair proposed for Delta

Reason for Change: As above

Description of Change:

Page A-3, APPENDIX I-C, ELECTRICAL EQUIPMENT:

Revise the below item in the Description List as follows:

"4 Control Panel-Regulator (a-c) Gen. Electric 3S2781F125A1" From:

To: "4 Control Panel-Regulator (a-c) Gen. Electric (P/N to be supplied)"

Effect on Weight Empty: Negligible Effect on Performance: Negligible
None

The following shall not appear in the specification language:

This proposal consists of providing feeder fault protection with a reset feature incorporated in the generator control panel. The modification of the panel will be accomplished by General Electric. The modified panel will have identical mounting provisions and electrical connections as present panel.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIFFO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | |
|---|------------------|---|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,473 DTD | | |
| CHANGE NO: 287 | | MODEL: 22-2 (Convair "880") | |
| TITLE: Specification Administrative (from Appendix I-C) | Change | (Delete one microphone | |
| ORIGIN: Convair initiated | | | |
| REASON FOR CHANGE: To clarify the int | tent of | f the specification. | |
| EFFECT ON WEIGHT | | EFFECT ON BALANCE * | |
| OPER, WT. EMPTY O O | | O INCH LB. | |
| EFFECT ON GUARANTEED PERFORMANCE: * | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPO ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES | SAL | MULANN / ENGINEERING APPROVAL | |
| LATEST DATE OF ACCEPTANCE: | AIRPLA | NES AFFECTED: | |
| SPECIAL PROVISIONS: | RECURF NON-RE | T ON PRICE PER AIRPLANE: RING: CURRING: | |
| ACCEPTED | CONVAI | R, A DIVISION OF GENERAL DYNAMICS CORP. | |
| ВУ- | | | |
| DATE. | | SORVALIAJI, OIZITA | |

Delta Air Lines Inc. Change No. 287

CONVAIR: SD

Title: Specification Administrative Change (Delete one

microphone from Appendix I-C)

Origin: Convair initiated

Reason for Change: To clarify the intent of the specification

Description of Change:

Page A-5, APPENDIX I-C, ELECTRONIC EQUIPMENT:

Revise the below item under "INTERPHONE SYSTEM (FLIGHT)" as follows:

From: "4 Microphones Telephonics RS-38E"

To: "3 Microphones Telephonics RS-38E"

A CIVISION OF GENERAL DYNAMICS CORPONATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|---|--|---|-------------------------|-----------------|------------|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,472 DTD | | | |
| CHANGE NO: 286 | | | MODEL: 22-2 | (Convair "880 | o") | |
| TITLE: Specificat: Power Cont | ion Administrative rol, and Fire Dete | Changector S | ge (Revision System) | to Essential | D-C | |
| ORIGIN: Convair in: | itiated. | | | | | |
| REASON FOR CHANGE: To | o clarify the inte | ent of | the specific | ation. | | |
| EFFECT | N WEIGHT * | | EFFEC | T ON BALANCE * | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPOR | SAL N | J. H. Sharp | NGINEERING APPR | OVAL | |
| LATEST DATE OF ACCEPTA | NCE: | | NES AFFECTED: | | | |
| | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | | R, A DIVISION OF GEN | | RP. | |
| BY: | | | | | | |
| DATE: | | | | See PAIL | Survey 11% | |

CONVAIR: SD Delta Air Lines Inc. Change No. 286

Specification Administrative Change (Revision to Essential D-C Title:

Power Control, and Fire Detector System)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 96, Paragraph 3.17.1.7.1 - D-C POWER CONTROL:

Revise the fourth sentence as follows:

"The dc power controlled by the "Essential" switch shall From:

supply the No. 2 VHF communication equipment, the No. 1

VHF navigation equipment and the HF equipment".

"The d-c power controlled by the "Essential" switch shall supply the No. 1 VHF communication equipment and the No. 1 To:

VHF navigation equipment".

Page 112, Paragraph 3.19.4.2.1 - GENERAL:

Revise the first sentence to read as follows:

"Single loop, discrete sensing, continuous-type fire detectors shall be installed in the nacelles, including the engine compressoraccessory section and the engine burner and turbine section".

Add the following in the left margin opposite Paragraph 3.19.4.2.1:

"9/120A"

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|--|---|---|-----------------------|--|-------------|------------|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10,440 DTD 3 Dece | | December 19 | |
| CHANGE NO: 285 | | | MODEL: | 22-2 | (Convai | r "880") |
| TITLE: Total Fuel Q | uantity, Increase | of | | 14-16-1-16-1 ₄ -1 ₂₋₁₄ | | |
| ORIGIN: TWA requeste | d and Convair pro | posed | for Del | ta | | |
| REASON FOR CHANGE: A | s above | | | | | |
| EFFECT ON WEIGHT * | | EFFECT ON BALANCE * | | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| Negligible | Negligible | | Ne | eglig: | lble | INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | - | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL N | | | BH | G APPROVAL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFE | | NOINE ENIM | AFROVAL |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | ** | CONVA | IR, A DIVISIO | N OF GE | NERAL DYNA | MICS CORP. |
| BY | | | | | | |
| DATE: | | | | | | |

Delta Air Lines Inc. Change No. 285

Title: Total Fuel Quantity, Increase of

TWA requested and Convair proposed for Delta. Origin:

Reason for Change: As above.

Description of Change:

This proposal has no effect on specification language since the 100 gallons total fuel increase proposed by this change falls within the specification tolerance.

This change is applicable to Delta airplanes 6 through 10.

Effect on Weight Empty: Negligible Effect on Balance: Effect on Performance:

Negligible

None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|---|-------------------|----------------------------------|--|--|--|--|
| CUSTOMER: Delta Air | Lines Inc. | MCL 10,468 DTD | | | | |
| CHANGE NO: 283 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specificati | on Administrative | Chang | ge (Delete Cargo Fire Detector) | | | |
| ORIGIN: Convair | initiated. | | | | | |
| REASON FOR CHANGE: | To clarify the in | tent o | of the specification. | | | |
| EFFECT (| ON WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | |
| | None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL | | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | Batimon | | | |
| | | | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: | | | | |
| No | | RECURRING: NON-RECURRING: TOTAL: | | | | |
| | | | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | | |
| | | | | | | |
| DATE: | | | 70NVA1 1,0,0, 6-12174 | | | |

Title: Specification Administrative Change (Delete Cargo Fire Detector)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 89, Paragraph 3.16.7.1 - EMERGENCY POWER:

Delete the below item under "Warning", and renumber the remaining Items | through 6:

"1. Cargo Fire Detector:"

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|--|--------------------------------------|-------------------------------|---------------------|-----------------------------|-------------|-------------------|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10 | 442 | DTD 11 D | ecember 195 |
| CHANGE NO: 282 | | | MODEL: _ | 22-2 | (Convair | "880") |
| TITLE: Right Han | d Club Area Table, | Modi | ficatio | on of | | |
| ORIGIN: TWA reque | sted and Convair p | ropos | ed for | Delta | | |
| REASON FOR CHANGE: | To eliminate the pof table during ta | reser ike-oi | it required and | irement L a nding | for stow | age |
| EFFECT | ON WEIGHT * | EFFECT ON BALANCE * | | | CE * | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| +2.0 lb | +2.0 lb | | | | +882 | INCH LB. |
| EFFECT ON GUARANTEED F | PERFORMANCE: * | | | | | |
| | None | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A | | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | Bl. Simono | | | |
| | | | | E | NGINEERING | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | AIRPLANES AFFECTED: | | | |
| R | | EFFECT ON PRICE PER AIRPLANE: | | | | |
| | | RECURRING: | | | | |
| 7 (2 (2 ())) | | CONV | AIR, A DIVIS | ION OF GE | NERAL DYNAM | CS CORP. |
| ВҮ- | | | | | | |
| DATE | | | | | r can | OVANILALO, GRUTTA |

Delta Air Lines Inc. CONVAIR: SD Change No. 282

Right Hand Club Area Table, Modification of Title:

TWA requested and Convair proposed for Delta Origin:

Reason for Change: To eliminate the present requirement for stowage

of table during take-off and landing.

Description of Change:

This proposal has no effect on specification language and consists of adding molded or equivalent padding to the edges of the club area card table. This padding will be of firm density "ensolite" having visible surfaces coated with wear resistant vinyl.

Above materials will be specified in the Customer Interior Finish Specification.

Effect on Weight Empty: +2.0 pounds Effect on Balance: +882 inch-pounds

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIE DO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | | |
|--|-----------------|---|---------------------------------|--------------|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,469 DTD | | | | |
| CHANGE NO. 284 | | | MODEL: 22-2 (Convair | "880") | | | |
| Specification Administrative Change (Change Emergency Brake Cylinder from 400 to 300 Cubic Inches) | | | | | | | |
| ORIGIN Convair ini | tiated | | | | | | |
| REASON FOR CHANGE: Replacement of the fiber glass air flask (2,200 psi) with the ICC steel flask (3,000 psi) made it necessary to reduce the cylinder volume from 400 to 300 cubic inches. | | | | | | | |
| EFFECT | N WEIGHT * | | EFFECT ON BALANCE | | | | |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | | | | | |
| 0 | 0 | | 0 | INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | | |
| | None | in be | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL | | | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | Bf Simon | | | | |
| | | | ENGINEERING | APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | | | AIRPLANES AFFECTED: | | | | |
| | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED: CO | | | IR, A DIVISION OF GENERAL DYNAM | ICS CORP. | | | |
| БҮ | | | | | | | |
| DATE | | | 201 | LVA(2 A-114) | | | |

CONVAIR: SD Delta Air Lines Inc. Change No. 284

Title: Specification Administrative Change (Change Emergency

Brake Cylinder from 400 to 300 Cubic Inches)

Origin: Convair initiated

Reason for Change: Replacement of the fiber glass air flask

(2,200 psi) with the ICC steel flask (3,000 psi) made it necessary to reduce the cylinder volume from 400 to 300 cubic

inches.

Description of Change:

Page A-17 - APPENDIX I-C - PNEUMATIC EQUIPMENT:

Revise the below item in the Description List as follows:

From: "2 Emergency Air Storage Flasks P/N to be supplied"

To: "1 Bottle and Drain Fitting, Walter 891545" Pneumatic, 3,000 PSI, 300-Cubic Inch Kidde

Enclosure: (A) One copy of Convair Graph - MAIN WHEEL EMERG BRAKE STORAGE PRESSURE VS APPLICATIONS (For information only)

Delta Air Lines Inc. Change No. 284

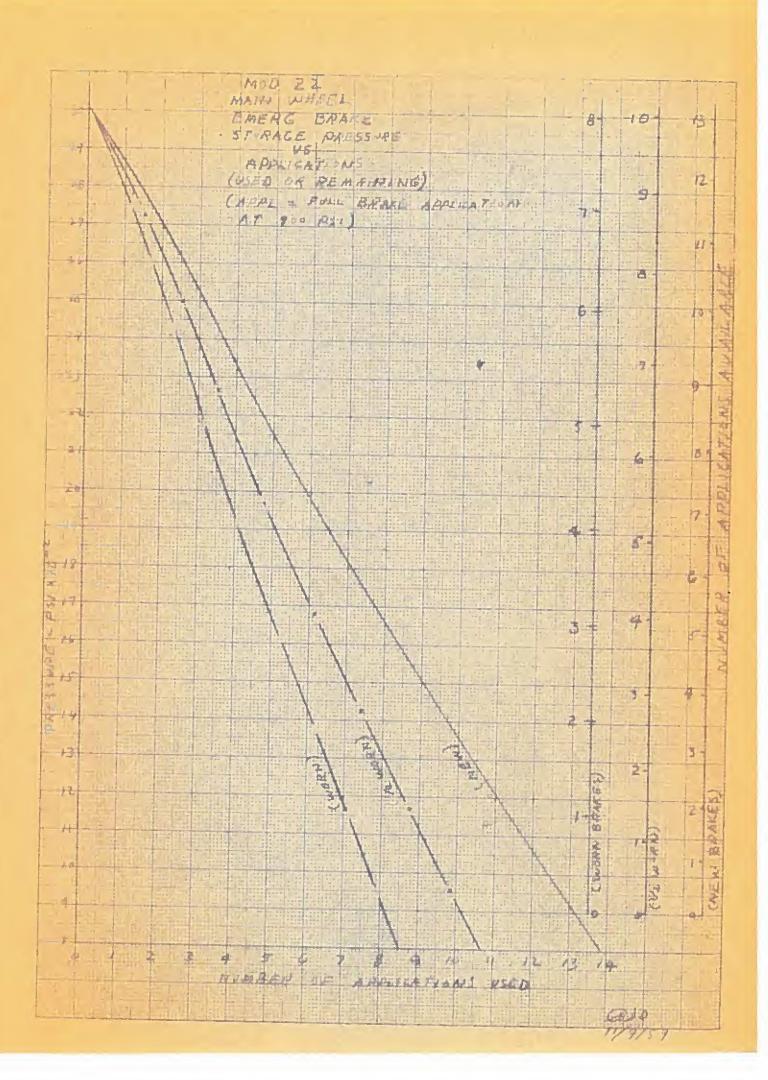
The following shall not appear in the specification language:

The markings on the gage of the 300 - cubic inch bottle denote the following:

Green Arc (Operating Range)
Red Line (Maximum Charge)
Yellow Radial Line (One Application)

1,600 to 3,000 lbs 3,040 lbs *1,200 lbs

*NOTE: Airplane not to take off under this condition.



A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20-22-003 | | | DATE: | | | |
|--|--|-----------------|--|------------------|--|--|
| CUSTOMER: Delta Air | TOMER: Delta Air Lines Inc. MCL 10,443 DTD 11 Dece | | | ecember 1959 | | |
| CHANGE NO: 281 | | | MODEL 22-2 (Convair " | 880") | | |
| TITLE: Cushioned H | lead Rest for Aft | Facin | g Stewardess, Installat | ion of | | |
| ORIGIN: TWA request | ed and Convair pro | posed | for Delta. | | | |
| REASON FOR CHANGE: As | above. | | | | | |
| EFFECT | EFFECT ON WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | | | | |
| +3.0 lb | +3.0 lb | | +2,378 | INCH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | BJAmono ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | | | | |
| SPECIAL PROVISIONS. | | RECUR NON-RE | CT ON PRICE PER AIRPLANE; RRING: RECURRING: L: | | | |
| ACCEPTED: | CCEPTED: CONVA | | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | | |
| DATE- | | | | 41 La D 1217.4 | | |

Delta Air Lines Inc. Change No. 281

Title: Cushioned Head Rest for Aft Facing Stewardess, Installation

Origin: TWA requested and Convair proposed for Delta.

Reason for Change: As above.

Description of Change:

Page 104, Paragraph 3.19.1.1.4 CABIN ATTENDANTS' SEATS:

Add the following to the end of the paragraph:

"An upholstered, detachable head rest shall be installed, one each on the aft face of the forward left hand coat compartment and on the left hand aft bulkhead for use of the aft facing cabin attendants."

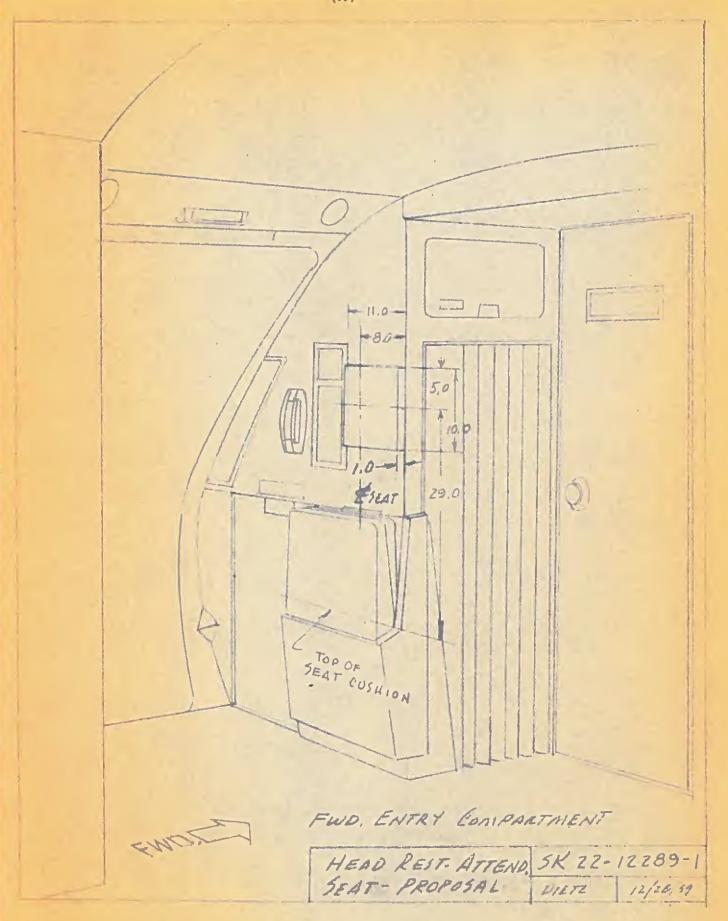
ENCLOSURES: (A) Convair Sketch - HEAD REST, ATTENDANT SEAT, FWD. ENTRY COMPARTMENT (For information only.)

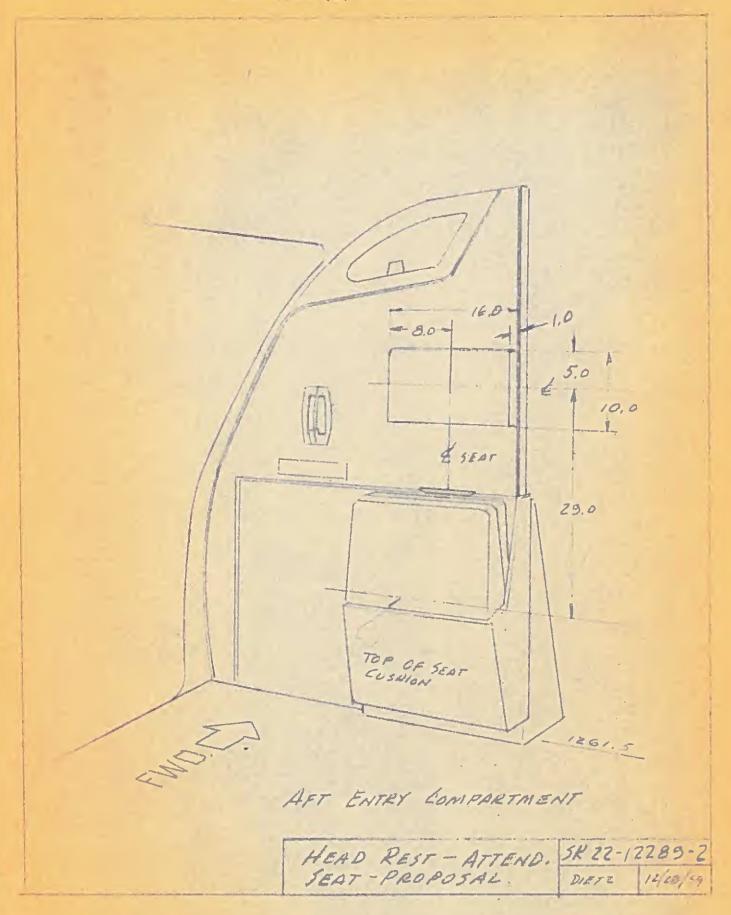
> Convair Sketch - HEAD REST, ATTENDANT SEAT, AFT ENTRY COMPARTMENT (For information only.)

Effect on Weight Empty: +3.0 pounds Effect on Balance: +2,378 inch-pounds Effect on Performance: None

The following shall not appear in the specification language:

The head rests will be fabricated of upholstered "ensolite" (medium density) and attached with snap fasteners or equivalent. The aft head rest will measure approximately 1" x 10" x 16", the forward head rest will measure approximately 1" x 10" x 11" (width of this head rest is limited by proximity of handset to centerline of seat).





A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | DATE: | | | | | |
|--|--|--|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,467 DTD | | | | | |
| CHANGE NO: 280 | MODEL: 22-2 (Convair "880") | | | | | |
| TITLE: Specification Administrative Interphone Location) | Change (Clarification of Service | | | | | |
| ORIGIN Convair initiated. | | | | | | |
| REASON FOR CHANGE: To specify service interphone station in the drinking water tank area in lieu of the air conditioning compartment. | | | | | | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE * | | | | | |
| GUAR, WT, EMPTY OPER, WT, EMPTY | | | | | | |
| 0 0 | O INCH LB. | | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * Non | le l | | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | SAL BALL | | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| BY: | | | | | | |
| DATE: | - 201 (A) | | | | | |

Delta Air Lines Inc. Change No. 280

rà

Title:

Specification Administrative Change (Clarification of

Service Interphone Location)

Origin:

Convair initiated.

Reason for Change:

To specify service interphone station in the

drinking water tank area in lieu of the air con-

ditioning compartment.

Description of Change:

Page 98, Paragraph 3.17.2.3.5 SERVICE INTERPHONE:

Revise the below item under service interphone stations as Tollows:

From: "Air Conditioning Compartment"

To: "Drinking Water Tank Area"

Effect on Weight Empty: O
Effect on Balance: O
Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE: | | | |
|---|---|----------------------------------|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,466 DTD | | | |
| CHANGE NO: 279 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specification Administrative Change (Replacement of out-dated and illegible illustrations) | | | | | | |
| ORIGIN: Convair initiated. | | | | | | |
| REASON FOR CHANGE: T | o replace obsoleso | sent a | and illegible illustrations. | | | |
| EFFECT | N WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR. WT. EMPTY | OPER, WT. EMPTY | | | | | |
| 0 0 | | | O INCH LB. | | | |
| EFFECT ON GUARANTEED P | EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A , ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | BASIMONS ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | | |
| RECU NON- | | | TON PRICE PER AIRPLANE: RING: ECURRING: | | | |
| ACCEPTED: CONVAIR, A DIVISION OF GENER | | | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | and the second | | | | | |
| DATE: | | | ************************************** | | | |

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|--|---|----------------------------------|---|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,465 DTD | | | |
| CHANGE NO: 278 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specification Administrative Change (Revised C.G. Limits Graph) | | | | | | |
| ORIGIN: Convair initiated. | | | | | | |
| REASON FOR CHANGE: To incorporate an up to date Center of Gravity Limits Graph into specification. | | | | | | |
| EFFECT (| ON WEIGHT * | | EFFECT ON BALANCE * , | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED F | EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A | | | | | | |
| ACCEPTANCE OF THIS CH. PRIOR ACCEPTANCE OF T | | | Bf Simons | | | |
| | | | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | | | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: | | | | |
| | | RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | | |
| DATE: | | | 751 VAIT, 5. J. 5(12)7 A | | | |
| The state of the s | | | 101 M | | | |

Title: Specification Administrative Change (Revised C.G. Limits Graph)

Origin: Convair initiated.

Reason for Change: To incorporate an up to date Center of Gravity Limits

Graph into specification.

Description of Change:

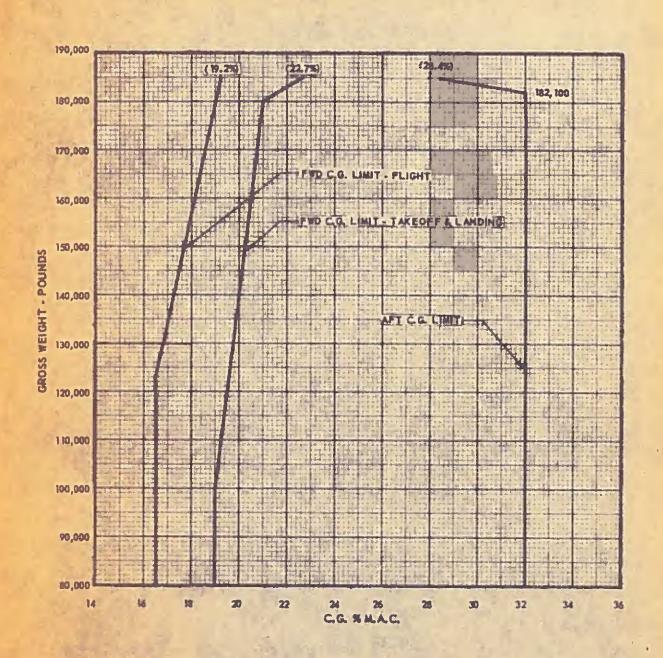
Page 12a, CENTER OF GRAVITY LIMITS

Replace above graph in specification with Enclosure: (A):

Enclosure: (A) One copy Page 12a, CENTER OF GRAVITY LIMITS (Revised)

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

Page 12a
Report No. ZD-22-003
Model 22
Date 9-20-56
Rev. 12-30-59



CENTER OF GRAVITY LIMITS

0127C

FIGURE 3.1-1

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|---|--------------------|--------|---|----------------------|------------|------------|
| CUSTOMER: Delta Air Lin | es Inc. | | MCL 10,4 | 39 | DTD 20 1 | November 1 |
| CHANGE NO: 277 | | | MODEL: 2 | | | |
| TITLE: External Po | wer Receptacle, | Revi | sion to | | | |
| ORIGIN: Verbal requi | est by C. J. MAY | Y to | S. J. HARI | RIS d | on 19 Nov | vember . |
| REASON FOR CHANGE. Custon | ner request. | | | | | |
| EFFECT ON WE | IGHT * | | E F | FECT | ON BALANO | E* |
| GUAR. WT. EMPTY OPE | R. WT, EMPTY | | | | | |
| +2.0 lb | +2.0 lb +2.0 lb | | +740 INCH LB. | | | INCH LB. |
| EFFECT ON GUARANTEED PERFO | RMANCE: * None | | | - All year summan is | | |
| * NEGLIGIBLE CHANGES WILL BE TOTALS REFLECTED IN A FUTU ACCEPTANCE OF THIS CHANGE PRIOR ACCEPTANCE OF THE FO | RE CHANGE PROPOSAL | | | | Simo | |
| LATEST DATE OF ACCEPTANCE: | | | | | INEERING A | - |
| ENTEST DATE OF ACCEPTANCE: | A | IRPLAI | NES AFFECTE | | | |
| REC NO: | | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED. | | | , A DIVISION OF | | | |
| ВУ | | | | | | |
| DATE: | | | | | | |

Delta Air Lines Inc. Change No. 277

CONVAIR: SD

Title: External Power Receptacle, Revision to

Origin: Verbal request by C. J. MAY to S. J. HARRIS on 19 November 1959

Reason for Change: Customer request.

Description of Change:

Page A-3, APPENDIX I-C, ELECTRICAL EQUIPMENT:

Add the following item to the "Description List" under "External Power Receptacle":

"1 Transformer Rectifier Gen. Electric 6RW105YF1" (28-Volt, D-C)

Effect on Weight Empty: +2.0 pounds

Effect on Balance: +740 inch-pounds

Effect on Performance: None

The following shall not appear in the specification language:

This proposal consists of the installation of the following in the external power junction box:

- a. One G. E. No. 6RW105YF1 transformer rectifier.
- b. Two five-ampere limiters and blocks.

Above equipment will be stencil identified.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | | |
|--|--|--|----------|------------|----------|--------------|---------------------|
| CUSTOMER: Delta Air Lines Inc. | | | MCL _ | 10,409 | DTD | Revi 15 J | sed une 1959 |
| CHANGE NO: 276 | | 6 | MODEL | 22-2 | (Con | vair | "880") |
| TITLE: Performance Guarantees, Revision to | | | | | | | |
| | | | | | | ٠, | |
| ORIGIN: Delta verb | al request on 4 Ju | ne 199 | 59 | | | | |
| REASON FOR CHANGE: 0 | ustomer request. | | | | | | |
| | | | | | | | |
| EFFECT | ON WEIGHT * | | | EFFI | CT ON B | ALANC | E * |
| GUAR, WT. EMPTY | OPER, WT, EMPTY | | | | | | |
| 0 | 0 | | | | _ | 0 | INCH LB. |
| EFFECT ON GUARANTEED F | EFFECT ON GUARANTEED PERFORMANCE: * As noted. | | | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | | | / | | |
| | | | 180 | War | ENGINEE | RING A | PPROVAL |
| LATEST DATE OF ACCEPTANCE: | | | NES AF | FECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANÉ: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED: CO | | CONVAI | R, A DIV | ISION OF G | ENERAL (| YN AMIC | S CORP. |
| BY: | | | | | | | |
| DATE: | | | | - | | CONV | 7 A1 LS.D. 6-1217 A |

Delta Air Lines Inc. Change No. 276

Page 1 of 4

Title: Performance Guarantees, Revision to

Origin: Delta verbal request on 4 June 1959

Reason for Change: Customer request.

Description of Change:

Page 7, Paragraph 2.1 APPLICABLE FEDERAL REGULATIONS:

In the first line of second sentence, change "SR-422 adopted 23 July 1957" to "SR-422B adopted 29 August 1959".

In the third sentence, change "Civil Aeronautics Administration" to "Federal Aviation Agency".

Page 10, Paragraph 3.1.1.1 THE FOLLOWING PERFORMANCE OF THE AIRPLANE IS GUARANTEED:

Revise the below items under "GUARANTEED PERFORMANCE" as follows:

| From | "Condition | Units | Tolerance | Item |
|------|---|-------|--------------|-------|
| | Take-off distance at sea level over 50-ft obstacle in accordance with CAR 4b (1.2 Vs1 used for take-off speed) with a weight of 140,000 lb | ft | <u>+</u> 5% | 4,630 |
| | Take-off distance at sea level over 50-ft obstacle in accordance with CAR 4b (1.2 Vs. used for take-off speed) with a weight of 173,500 lb at lift off in standard air | ft | <u>+</u> 800 | 7,610 |
| | Take-off distance at sea level on 90°F day over 31 ft obsta- cle in accordance with CAR 4b (1.2 Vs. used for take-off speed) With weight of 173,500 lb at lift off | ft | <u>+</u> 850 | 8,350 |
| | Take-off distance at sea level over 31-ft obstacle in accordance with CAR 4b (1.2 Vs. used for take-off speed) on a 90-degree F day with weight of 160,000 lb | ft | <u>+</u> 5% | 6,820 |

Page 2 of 4

| Condition | Units | Tolerance | Item |
|---|--|--|--|
| CAA landing distance (intended destination) at sea level over 50-ft obstacle in accordance with CAR 4b with weight of 132,800 lb | ft | <u>+</u> 5% | 6,000 |
| Maximum allowable take-off weight at sea level in accord- ance with CAR 4b climb require- ments (but this shall not pre- clude operation at 174,025 lb at the start of the take-off | 1h | | 173,500 |
| | 20 | | 110,500 |
| weight at sea level in accordance with CAR 4b climb requirements | lb | | 132,800 |
| Maximum CAR 4b en-route operating altitude with one engine in-operative and weight of 165,000 lb | ft | <u>+</u> 10% | 18,500 |
| Maximum CAR 40 en-route operating altitude with two engines inoperative and weight of 140,000 lb | lb | <u>+</u> 10% | 16,000" |
| "Condition | Units | Tolerance | Item |
| Take-off distance at sea level in accordance with SR-422B with a weight of 140,000 lb | ft | None | 5,330* |
| Take-off distance at sea level in accordance with SR-422B with a weight of 173,500 lb | ft | <u>+</u> 5% | 7,500 * |
| Take-off distance at sea level on 90°F day in accordance with SR-422B with a weight of 173,500 lb | ft | <u>+</u> 5% | 8,785* |
| | CAA landing distance (intended destination) at sea level over 50-ft obstacle in accordance with CAR 4b with weight of 132,800 lb | CAA landing distance (intended destination) at sea level over 50-ft obstacle in accordance with CAR 4b with weight of 132,800 lb | CAA landing distance (intended destination) at sea level over 50-ft obstacle in accordance with CAR 4b with weight of 132,800 lb |

Delta Air Lines, Inc. Change No. 276

Page 3 of 4

| Condit | ion | Units | Tolerance | Item |
|------------------|--|--|---|---------------|
| on 90° SR-422 | ff distance at sea level F day in accordance with B with a weight of O lb | ft | <u>+</u> 5% | 7,430* |
| *NOTE: | The quoted take-off distabased on FAA certification May 10, 1960. If the FAA require recertification of fied performance data, the ences in certified data sthe guarantees above. Af such differences, if any, off distances shall not be distances prior to CCP No CAR 4b, plus the increment the basis from CAR 4b to calculated to be as follows. | n data should f the pe resul hall be ter app the re great 276 at due t SR-422E | prior to subsequent resent cert ting differ applied to lication of sultant tak er than the nd based on o changing | i- - e- |
| | Condition | T.O. D | istance (ft |) |
| | 140,000 1b Std. temp. | <u>+</u> 5% | 5,350 | |
| | 173,500 lb Std. temp. | <u>+</u> 800 | 8,350 | |
| | 173,500 lb 90°F | <u>+</u> 850 | 9,370 | |
| | 160,000 lb 90°F | <u>+</u> 5% | 7,840 | |
| Condit | ion | Units | Tolerance | Item |
| tinati cordar | ng distance (intended des- ton) at sea level in ac- nce with SR-422B with tof 132,800 lb | ft | <u>+</u> 5% | 6,000 |
| weight | m allowable take-off at sea level in accord-with SR-422B | lb | | 184,500 |
| weight | um allowable landing at sea level in accord- with SR-422B | 1b | | 132,800 |

Delta Air Lines, Inc. Change No. 276

Page 4 of 4

| Condition | Units | Tolerance | Item |
|---|-------|-----------|---------|
| Maximum en-route operating altitude with one engine in-operative in accordance with SR-422B and weight of 165,000 lb | 1b | None | 21,500 |
| Maximum en-route operating altitude with two engines in-operative in accordance with SR-422B and weight of 140,000 lb | ft | None | 18,000" |

Page 11, under "STALL SPEED" change "CAA" to "FAA".

Effect on Weight Empty: 0

Effect on Balance: O Effect on Performance: As noted

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN HEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | DATE: |
|---|---|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,436 DTD |
| CHANGE NO: 275 | MODEL: 22-2 (Convair "880") |
| TITLE Window Valance Lighting, A | Addition of Translucent Covers for |
| ORIGIN Convair initiated. | |
| REASON FOR CHANGE: To make valance | lighting more attractive. |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE * |
| GUAR, WT. EMPTY OPER, WT. EMPTY | |
| +12.0 lb +12.0 ll | +9,996 INCH LB. |
| EFFECT ON GUARANTEED PERFORMANCE: * Nov | ne ' |
| * NEOLIGIBLE CHANGES WILL BE ACCUMULATED A TOTALS REFLECTED IN A FUTURE CHANGE PRO ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPRIOR ACCEPTANCE OF THE FOLLOWING CHANGE | PON |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: |
| ACCEPTEL: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| 8Y | |
| DATE: | ©* |

Delta Air Lines Inc. Change No. 275

Window Valance Lighting, Addition of Translucent Covers for Title:

Origin: Convair initiated.

Reason for Change: To make valance lighting more attractive.

Description of Change:

Page 78, Paragraph 3.16.8.7 SIDE WINDOW LIGHTING:

Revise the first sentence as follows:

"Valance type fluorescent lighting, including a dimming From: feature, shall be installed at the cabin side windows.

"Valance-type fluorescent lighting, including a dimming To: feature and translucent covers, shall be installed at the cabin side windows."

Effect on Weight Empty: +12.0 pounds Effect on Balance: +9,996 inch-pounds None

Effect on Performance:

A IN 1910) OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE: | | | |
|---|----------------------------|---|---|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,463 DTD | | | | |
| CHANGE NO: 274 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specification Administrative Change (Revision to seat back movement pressure) | | | | | | |
| ORIGIN: Convair | ORIGIN: Convair initiated. | | | | | |
| REASON FOR CHANGE: To provide seat breakover in accordance with CAM 4b. 362-6(c). | | | | | | |
| EFFECT | N WEIGHT | | EFFECT ON BALANCE *, | | | |
| GUAR, WT, EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | O INCH LB. | | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: J. H. J. Mary Engineering Approval | | | | | | |
| LATEST DATE OF ACCEPTA | NCE: | | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | | |
| DATE: | | | 70 / / / / / | | | |

Delta Air Lines Inc. Change No. 274

Title: Specification Administrative Change (Revision to seat back

movement pressure)

Origin: Convair initiated.

Reason for Change: To provide seat breakover in accordance with CAM

4b. 362-6(c).

Description of Change:

Page 104 (Cont), Paragraph 3.19.1.1.6.1 SEAT BACK MOVEMENT:

Revise the paragraph to read as follows:

"Each reclining seat shall be designed so that pressure applied on the aft side of the seat-back will override the recline control lock without additional manual operation, and fold the seat-back forward to its normal upright position. This pressure on the seat-back shall not exceed 25 pounds. The seat-back shall fold further forward to approximately 30 degrees forward of the normal upright position (as defined below) without removal of the arm rests, by applying a load of not less than 30 pounds pressure or more than 35 pounds pressure on the aft side of the seat-back. Seat-back positions shall be as follows:

Normal Upright: 15 degrees aft of vertical

Recline: 38 degrees aft of vertical

Effect on Weight Empty: 0 Effect on Balance: 0 Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|---|---|---|---|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,462 DTD | | |
| CHANGE NO: 273 | | | MODEL: 22-2 (Convair "880") | | |
| TITLE: Specification Administrative Change (Revision to landing gear hydraulic system, and clarification of landing gear retraction | | | | | |
| ORIGIN: Convair ini | tiated. | | | | |
| REASON FOR CHANGE: | To clarify the in | itent (| of the specification. | | |
| | ON WEIGHT * | + | EFFECT ON BALANCE * | | |
| | OPER. WT. EMPTY | | | | |
| 0 | 0 | | O INCH LB. | | |
| EFFECT ON GUARANTEED P | EFFECT ON GUARANTEED PERFORMANCE: * None | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA | FUTURE CHANGE PROPOS | SAL | | | |
| PRIOR ACCEPTANCE OF THE | TE FOLL OWING CHANGES: | | Bolineering Approval | | |
| LATEST DATE OF ACCEPTANCE: AIRPL | | | ANES AFFECTED: | | |
| RE NO | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: | | CONVAI | R, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | | |
| DATE | | | °©°€V 41 ₹,J,J, 6,1°21, A | | |

Title: Specification Administrative Change (Revision to landing gear hydraulic system, and clarification of landing gear retraction)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 35, Paragraph 3.8.2.5 RETRACTING, EXTENDING AND LOCKING SYSTEMS;

Delete the paragraph and substitute the following:

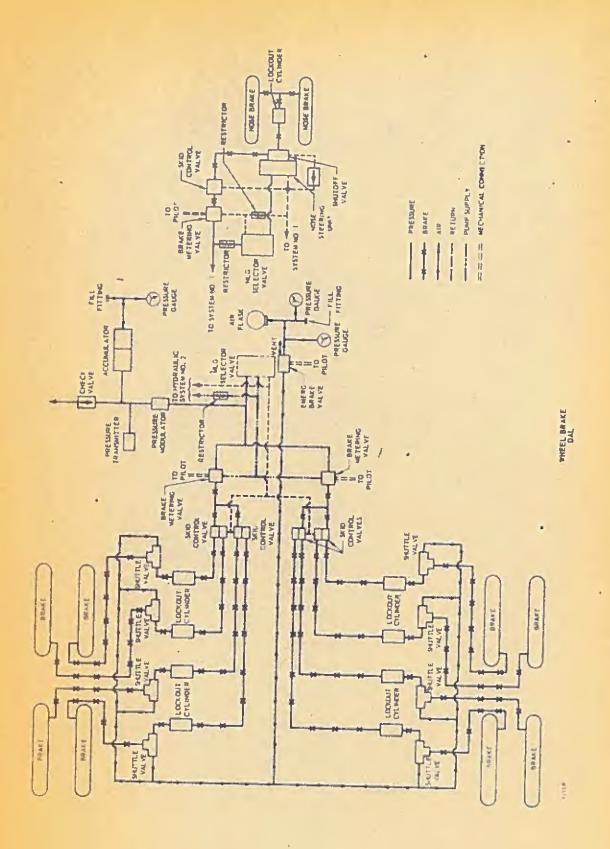
"Landing gear retraction shall be accomplished hydraulically to a point where the gear is within the wheel well cavity and the landing gear doors are closed in a maximum of ten seconds with four engines operating. Under three-engine operation conditions, the gear retraction cycle shall not exceed 12 seconds."

- Enclosure: (A) One copy Page 38a MAIN LANDING GEAR SYSTEM (Revised)
 - (B) One copy Page 38b WHEEL BRAKE (Revised)

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

The following shall not appear in specification language:

Enclosures (A) and (B) will be incorporated into specification on Customer approval of this proposal.



A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|--|-----------------|---|-----------------------------|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,460 DTD | | |
| CHANGE NO: 271 | | | MODEL: 22-2 (Convair "880") | | |
| TITLE: Specification Administrative Change (Revision to P/N of Fuel Flowmeter Transmitter) | | | | | |
| ORIGIN: Convair initiated based on General Electric revision to subject part. | | | | | |
| REASON FOR CHANGE: To incorporate an improved brush rigging in the synchro motor of the transmitter on five airplanes. | | | | | |
| EFFECT ON WEIGHT * | | | EFFECT ON BALANCE 1 | | |
| GUAF. WT. EMPTY | OPER. WT. EMPTY | | | | |
| Negligible | Negligible | | Negligible INCH LB. | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ################################### | | | | | |
| LATEST DATE OF ACCEPTANCE: | | | LANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | |
| DATE: | | | TONVASS, 5. 0-1017A | | |

Delta Air Lines Inc. Change No. 279

CONVAIR: SD

Title: Specification Administrative Change (Replacement of out-

dated and illegible illustrations)

Origin: Convair initiated.

Reason for Change: To replace obsolescent and illegible illustrations.

Description of Change:

Page 12C, FIGURE 3.1-3 - MAXIMUM LEVEL FLIGHT SPEEDS

Page 56A, FIGURE 3.12-1 - ENGINE STARTING SYSTEM
Page 62C, FIGURE 3.14-3 - FLIGHT ENGINEER'S PANEL
Page 62D, FIGURE 3.14-4 - PILOT'S & COPILOT'S OVERHEAD CONTROL PANEL
Page 89A, FIGURE 3.16-1 - A-C POWER SYSTEM

Page 89B, FIGURE 3.16-2 - D-C POWER SYSTEM
Page 102D, FIGURE 3.17-2 - PITOT STATIC SYSTEM
Page 115A, FIGURE 3.19-1 - TEMPERATURE MEASUREMENT PLANE

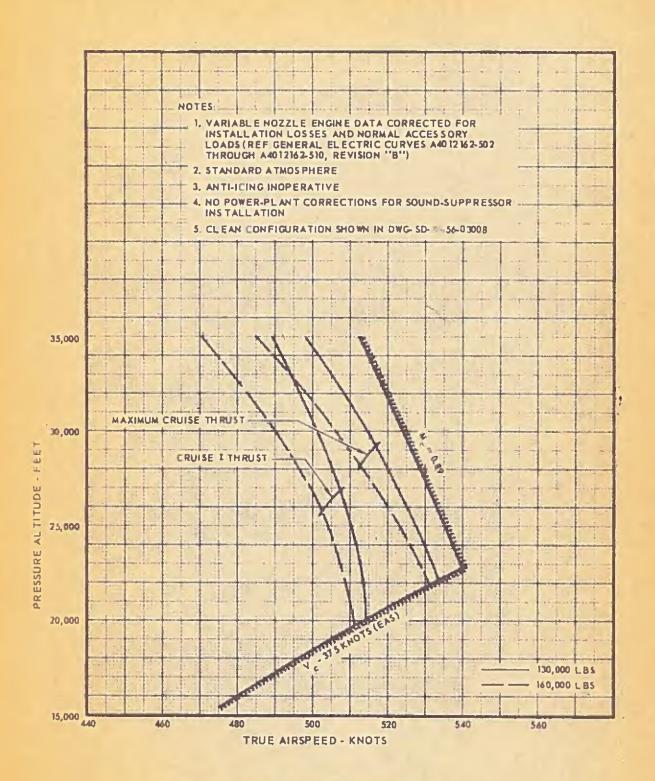
Page 122A, FIGURE 3.20-1 - AIR CONDITIONING PRESSURIZATION SYSTEM
Page 122B, FIGURE 3.20-2 - ESTIMATED CABIN PRESSURE SCHEDULE
Page 122C, FIGURE 3.20-3 - TEMPERATURE VS ALTITUDE
Page 122D, FIGURE 3.20-4 - CABIN AIR CONDITIONING SYSTEM PERFORMANCE

One revised copy each of the above illustrations is attached hereto for Customer approval and subsequent incorporation into specification.

Effect on Weight Empty: Effect on Balance: Effect on Performance: None

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Rev. 12-9-59



MAXIMUM LEVEL FLIGHT SPEEDS
FOUR GENERAL ELECTRIC CJ805 (J79) ENGINES

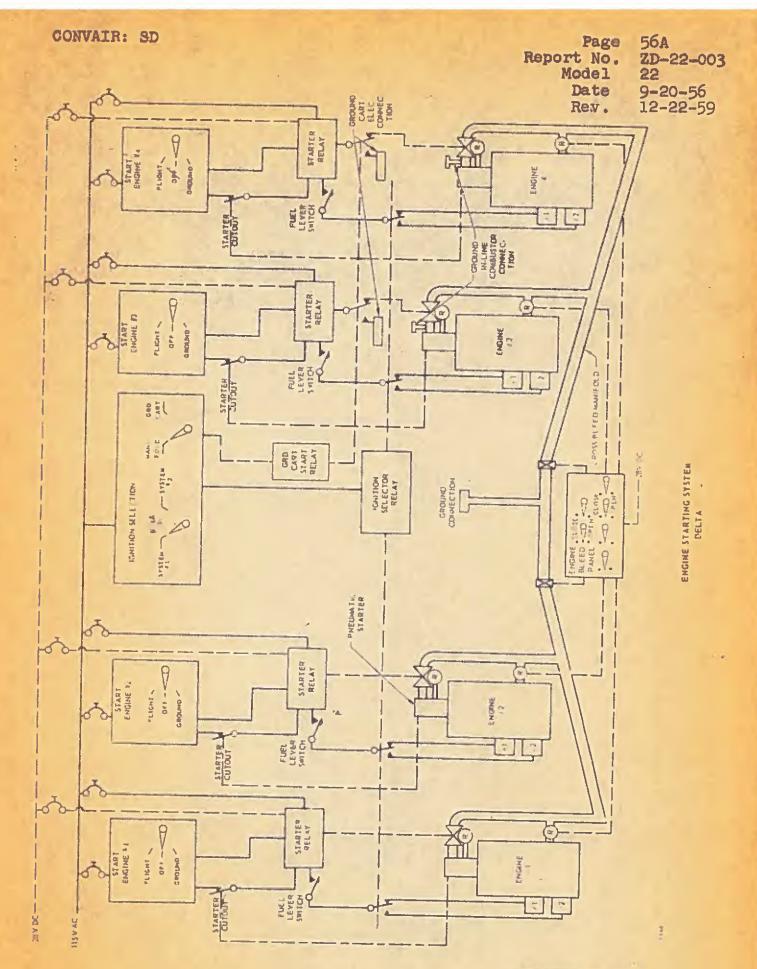
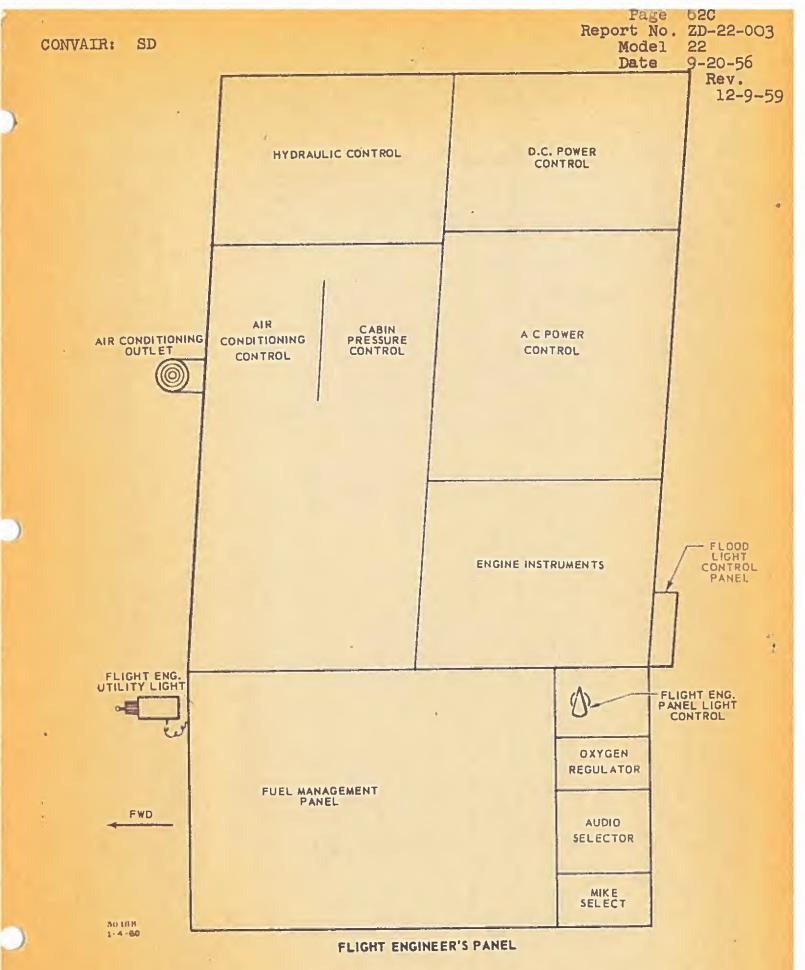


FIGURE 3.12-1

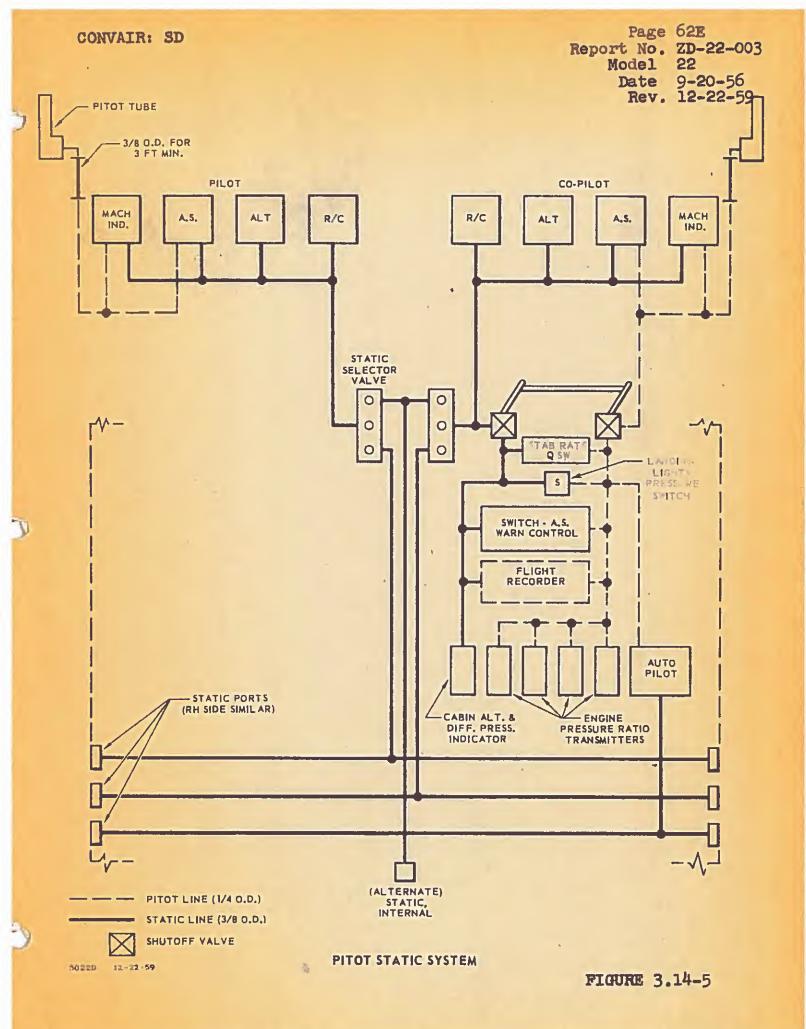


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Report No. ZD-22-003
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Rev. 12-9-59

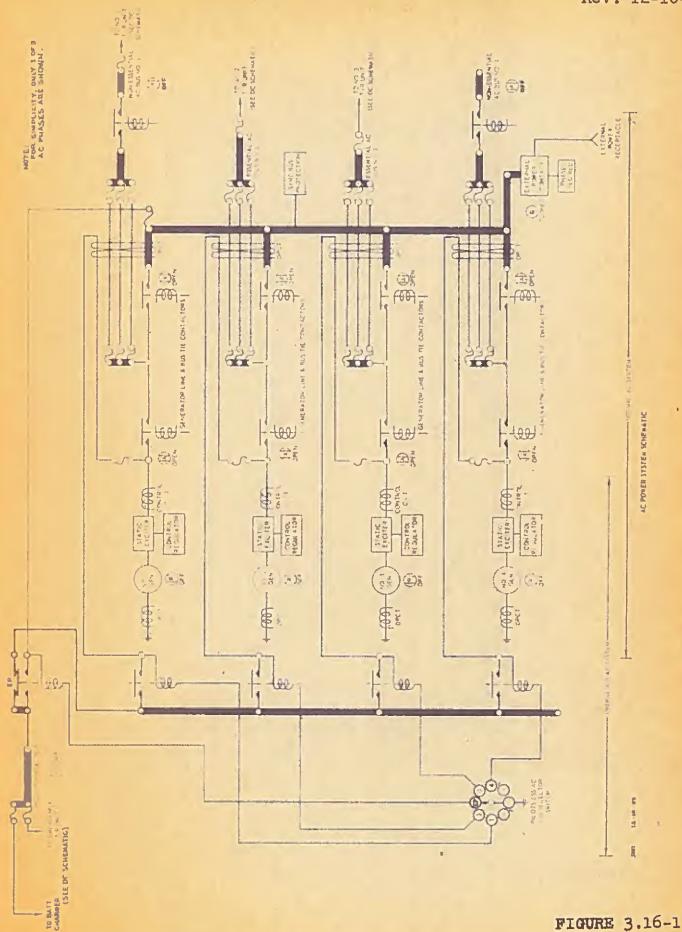
| SPACE | SPACE | SPACE |
|------------------------------------|----------------------------|--------------------------------------|
| ESSENTIAL BUS SELECTOR | RADIO FREQUENCY LIST | RADIO POWER SWITCHES |
| LEADING EDGE TEMP (DE-ICING) | (WING & TAIL) ANTI-ICE | EXCESS HEAT & ISOLATION |
| ENGINE ANTI-ICE | ENGINE BLEED | WINDSHIELD ANTI-ICE & ANTI-FOG |
| INTERIOR LIGHTS | ENGINE STARTERS | INTERIOR LIGHTS |
| ⁵ MISC. | EXTÉRIOR LIGHTS | EXTERIOR LIGHTS |

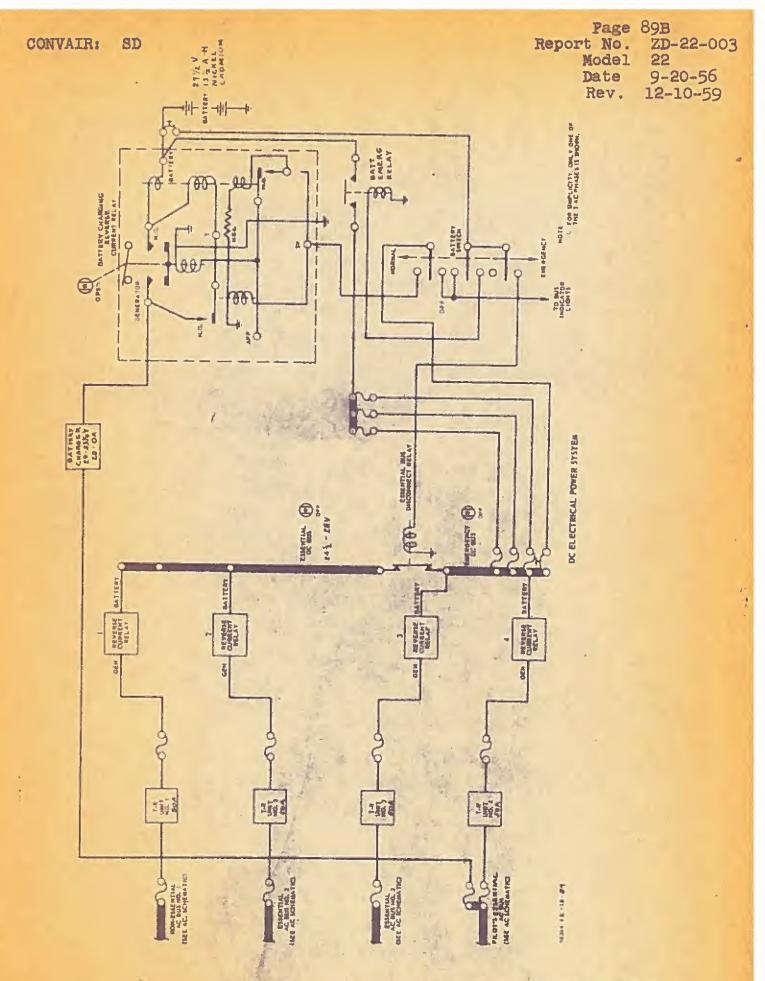
AIRP ANE

PILOT'S & CO-PILOT'S
OVERHEAD CONTROL PANEL



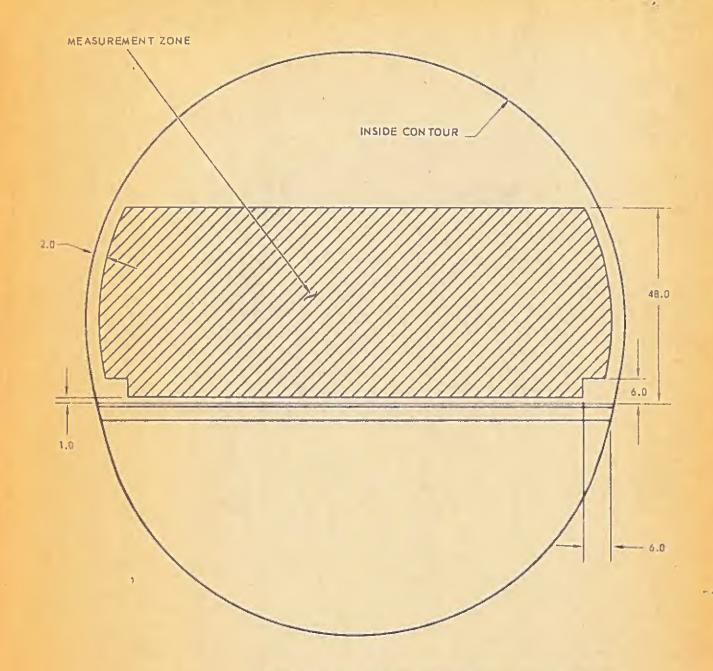
Page 89A
Report No. ZD-22-003
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Date 9-20-56
Rev. 12-10-59





Page 115A
Report No. ZD-22-003
Model 22
Date 9-20-56

Date 9-20-56 Rev. 12-9-59

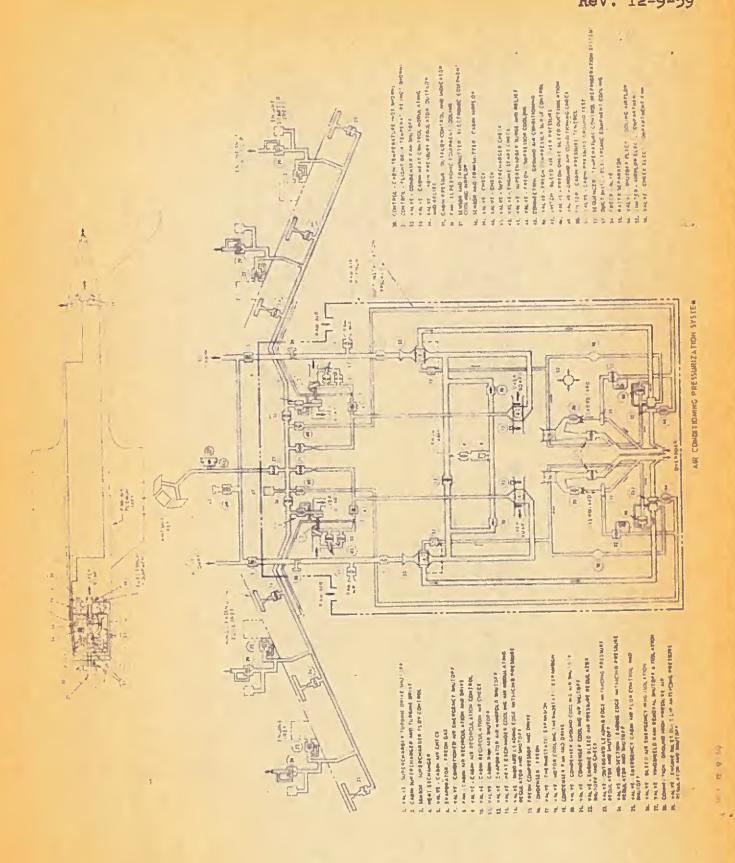


- NOTES: 1. "FREE AIR TEMPERATURE" IS TEMPERATURE MEASURED AWAY FROM THE DIRECT INFLUENCE OF SUPPLY AIR JET TEMPERATURES.
 - THE LIMITING TEMPERATURE VARIATIONS SHALL BE APPLICABLE ONLY TO AN AIRPLANE CARRYING NU PASSENGERS.

CUL.

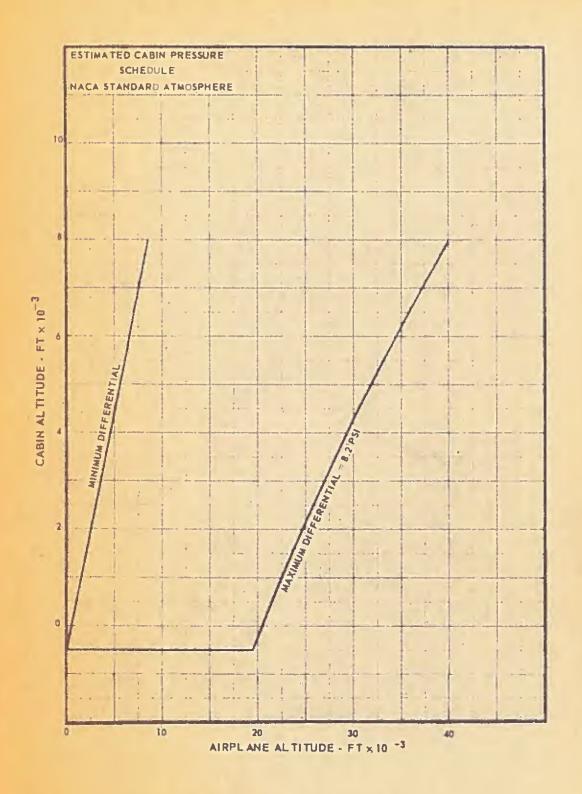
TEMPERATURE MEASUREMENT PLANE

Report No. ZD-22-003 Model 22 Date 9-20-56 Rev. 12-9-59



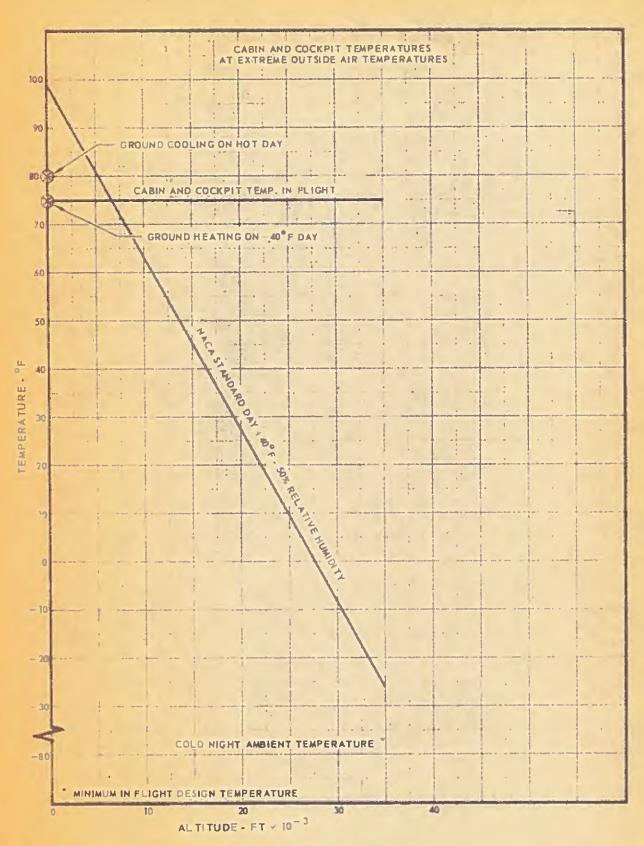
WHIT.

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Report No. ZD-22-003
Model 22
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ESTIMATED CABIN PRESSURE SCHEDULE

Page 1220 Report No. ZD-22-003 Model 22 Date 9-20-56 Rev. 12-9-59



A DIVINION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO. ZD- 22-003 | | DATE: | |
|-------------------------------|---------------------|--|--|
| CUSTOMER Delta Air Lines Inc. | | MCL 10,511 DTD 6 April 1960 | |
| CHANGE NO. 300 | | MODEL 22-2 (Convair "880") | |
| TITLE: Flap Setti | ng, Takeoff, Chang | e of | |
| ORIGIN TWA reques | ted and Convair pr | oposed for Delta | |
| REASON FOR CHANGE: | As above | | |
| | | | |
| | ON WEIGHT . | EFFECT ON BALANCE * | |
| | OPER, WT. EMPTY | | |
| 0 | 0 | O INCH LB. | |
| EFFECT ON GUARANTEED | | l be noted in Flight Manual | |
| ACCEPTANCE OF THIS CH | FUTURE CHANGE PROPO | SAL DN | |
| | | ENGINEERING APPROVAL | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED. | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | |
| ACCEPTED: | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | |
| BY: | | | |
| DATE: | | The death of the later of the l | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 300

Title: Flap Setting, Takeoff, Change of

Origin: TWA requested and Convair proposed for Delta

Reason for Change: As above

Description of Change:

This proposal has no effect on specification language, and consists of modifying the airplane certification program to include takeoff flap setting at 30 degrees.

The Flight Manual will be revised as required to show the effect of this proposal.

Effect on Weight Empty: O Effect on Balance: O

Effect on Performance: As will be noted in Flight Manual

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE: | | |
|--|---|---|--|-----------------------|--|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10,503 DTD 19 | January 196 | |
| CHANGE NO: 299 | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Snubber, Ca | irgo Door, Install | ation | of | | |
| ORIGIN: TWA request | ted and Convair pr | opose | d for Delta | | |
| dı | | | ying weight of cargo to eliminate a poter | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BAL | ANCE 1 | |
| GUAR. WT. EMPTY +22.0 lbs | OPER. WT. EMPTY | | +17,656 | INCH LB. | |
| EFFECT ON GUARANTEED F | PERFORMANCE: * | 1 107 | | | |
| | None | | | | |
| TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH. PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL N | Mason | | |
| | | • | ENGINEERIN | G APPROVAL | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYN | AMICS CORP. | |
| BY: | | | | | |
| DATE: | | | | TOUTS ALT AND AUTOSTA | |

E DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO .: ZD- 22-003 | | | DATE: | | | | |
|--|---------------------------------------|---|--|--|--|--|--|
| CUSTOMER. Delta Air Lines Inc. | | | MCL 10,483 DTD | | | | |
| CHANGE NO 298 | | | MODEL: 22-2 (Convair "880") | | | | |
| THILL Specific Covering | ation Administrat Interchangeabili | ive Ch ty and | nange (Change to Cabin Floor d Delete Fwd Lounge Removal) | | | | |
| ORIGIN. Convair | initiated | | | | | | |
| REASON FOR CHANGE: T | o clarify the inte | ent of | the specification. | | | | |
| | | | | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE * | | | | |
| GUAF, WT. EMPTY | | | O INCH LB. | | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | | |
| | None | | | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REPLECTED IN A | | | | | | | |
| ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF T | | | 3) Aimon | | | | |
| | | | ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPLA | ANES AFFECTED: | | | | |
| SPECIAL PROVISIONS | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED. | | | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | | | | | |
| DATE | - | | Part values industria | | | | |

Delta Air Lines Inc. Change No. 298

Title: Specification Administrative Change (Change to Cabin Floor

Covering Interchangeability and Delete Fwd Lounge Removal)

Origin: Convair initiated

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 125, Paragraph 3.23.1 EQUIPMENT INTERCHANGEABILITY:

Add the following item under "1. Interchangeable Parts":

"Cabin Floor Covering"

Delete the below item under "2. Interchangeable Without Alterations":

"Cabin Floor Rugs"

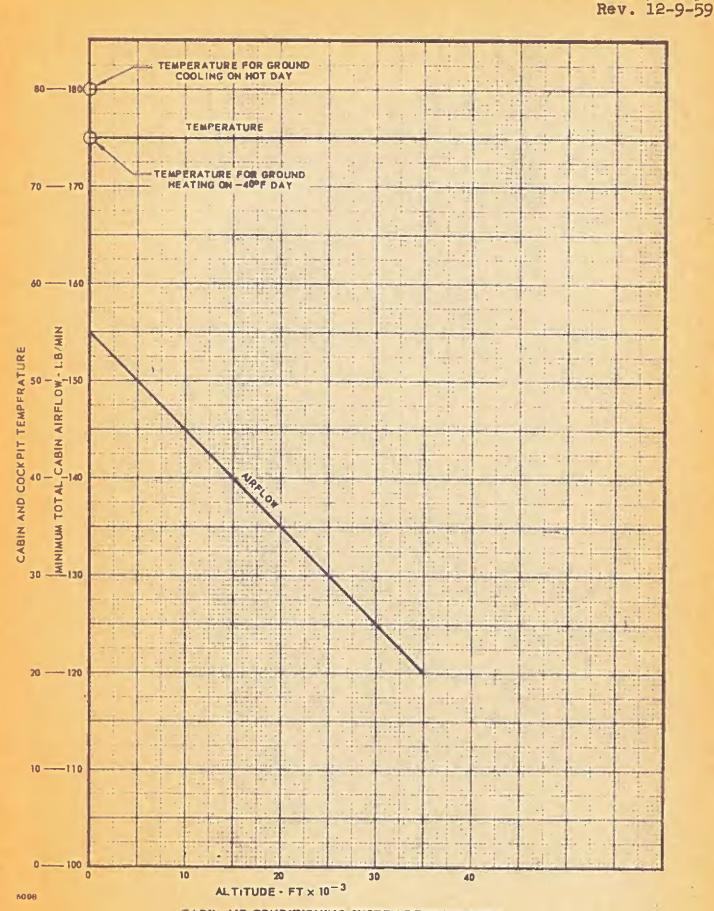
Page B-2, APPENDIX I-D, COMPONENT REMOVAL AND REPLACEMENT TIME:

Delete the below item under "Replacement Item":

"Fwd Lounge Removal 4 4.0 1.0"

Effect on Weight Empty: 0 Effect on Balance: 0 Effect on Performance: None

Page 122D
Report No. ZD-22-003
Model 22
Date 9-20-56



Delta Air Lines Inc. Change No. 271

CONVAIR: SD

Title: Specification Administrative Change (Revision to P/N of Fuel

Flowmeter Transmitter)

Origin: Convair initiated based on General Electric revision to subject

part.

Reason for Change: To incorporate an improved brush rigging in the

synchro motor of the transmitter on five airplanes.

Description of Change:

Page A-1, APPENDIX I-C, POWER PLANT EQUIPMENT:

Revise the below item under "Fuel System Equipment" as follows:

From: "4 Fuel Flow Transmitter Gen. Electric 8TJ59GAD-1"

To: "*4 Fuel Flow Transmitter Gen. Electric 8TJ59GAM-2

**4 Fuel Flow Transmitter Gen. Electric 8TJ59GAM-3"

Add the following to the bottom of Page A-1:

"*Applies to Airplanes 1 through 5
**Applies to Airplanes 6 through 10"

Effect on Weight Empty: Negligible Effect on Balance: Negligible

Effect on Performance: None

The following shall not appear in the specification language:

The prior changes to fuel flowmeter transmitter from P/N 8TJ9GAD-1 to P/N 8TJ59GAM-2 consisted of the following:

- 1. Change from 8TJ59GAD-1 to 8TJ59GAM-1, G. E. request that internal case on transmitter be a soldered joint, in lieu of a welded joint, to provide better access and to reduce scrappage.
- 2. Change from 8TJ59GAM-1 to 8TJ59GAM-2, Convair request for alteration of mounting bracketry to eliminate flowmeter interference with pod door frame.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | | |
|--|---|---|-----------------|---------------|-------------|-------------------|
| CUSTOMER: Delta Air | Lines Inc. | MCL 10,459 DTD | | | | |
| CHANGE NO: 270 | | MODEL: 22-2 (Convair "880") | | | "880") | |
| TITLE: Specificate extension | tion Administrativ and stabilizer wa | e Char | nge (R syste | evision m) | n to MLG | emergency |
| ORIGIN: Convair in | nitiated | | | | | |
| REASON FOR CHANGE: | Fo clarify the int | ent of | the the | specif: | ication. | |
| EFFECT | N WEIGHT * | | | EFFE | CT ON BALA | NCE * |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | | | 0 | INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | |
| | None | | | | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL N | | | BD Sin | nom G APPROVAL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AF | FECTED: | | |
| RECURRING NON-RECUR | | CT ON PRICE PER AIRPLANE: RRING: RECURRING: L: | | | | |
| ACCEPTED: | | CONVA | IR, A DIV | ISION OF G | ENERAL DYNA | AMICS CORP. |

Delta Air Lines Inc. Change No. 270

CONVAIR: SD

Title: Specification Administrative Change (Revision to MLG emer-

gency extension and stabilizer warning system)

Origin: Convair initiated

Reason for Change: To clarify the intent of the specification

Description of Change:

Page 34. Paragraph 3.8.1.5 - EMERGENCY EXTENSION:

Revise the second sentence as follows:

From: "A separate hydraulic pressure source shall be provided for emergency use to open and lock the main landing gear

doors".

To: "A pneumatic pressure source shall be provided for emergency use to open and lock the main landing gear doors".

Page 40, Paragraph 3.10.1.5 - STABILIZER SYSTEM:

Revise the last sentence as follows:

From: "A red warning light will indicate an incorrect stabilizer setting for takeoff whenever the airplane is on the ground".

To: A warning horn will indicate an incorrect stabilizer setting for takeoff, as defined in Paragraph 3.16.11.1".

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE: | | pr | | |
|---|---------------------------------------|-------|--|------------------|----------------------|------------------|--|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10, | 458 | DTD | | |
| CHANGE NO: 269 | | | MODEL: | 22-2 | (Convair | "880") | |
| TITLE Specificat Brake, NLO | ion Administrativ System and Hydra | e Cha | nge (Inc System I | orpora llustr | tion of W ations) | heel | |
| ORIGIN: Convair in | nitiated. | | | | | | |
| REASON FOR CHANGE: To incorporate subject, up to date, illustrations into the specification. | | | | | | | |
| , EFFECT O | | | | EFFECT | ON BALANC | E * | |
| GUAR, WT. EMPTY | | | | | * | | |
| 0 | 0 | | | | 0 | INCH LB. | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | • | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: **TALKAPP** ENGINEERING APPROVAL | | | | | | PPROVAL | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFEC | TED: | | | |
| | | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | CONVA | IR, A DIVISION | OF GENT | ERAL DYNAMIC | S CORP. | |
| BY: | | | | | | | |
| DATE: | | | | | - 1049 | 477,5 C. 6-1217A | |

Delta Air Lines Inc. Change No. 269

CONVAIR: SD

Title: Specification Administrative Change (Incorporation of Wheel

Brake, NLG System and Hydraulic System Illustrations)

Origin: Convair initiated.

Reason for Change: To incorporate subject, up to date, illustrations

into the specification.

Description of Change:

Page 38b - WHEEL BRAKE

Page 38c - NOSE LANDING GEAR SYSTEM

Page 64a - HYDRAULIC SYSTEM

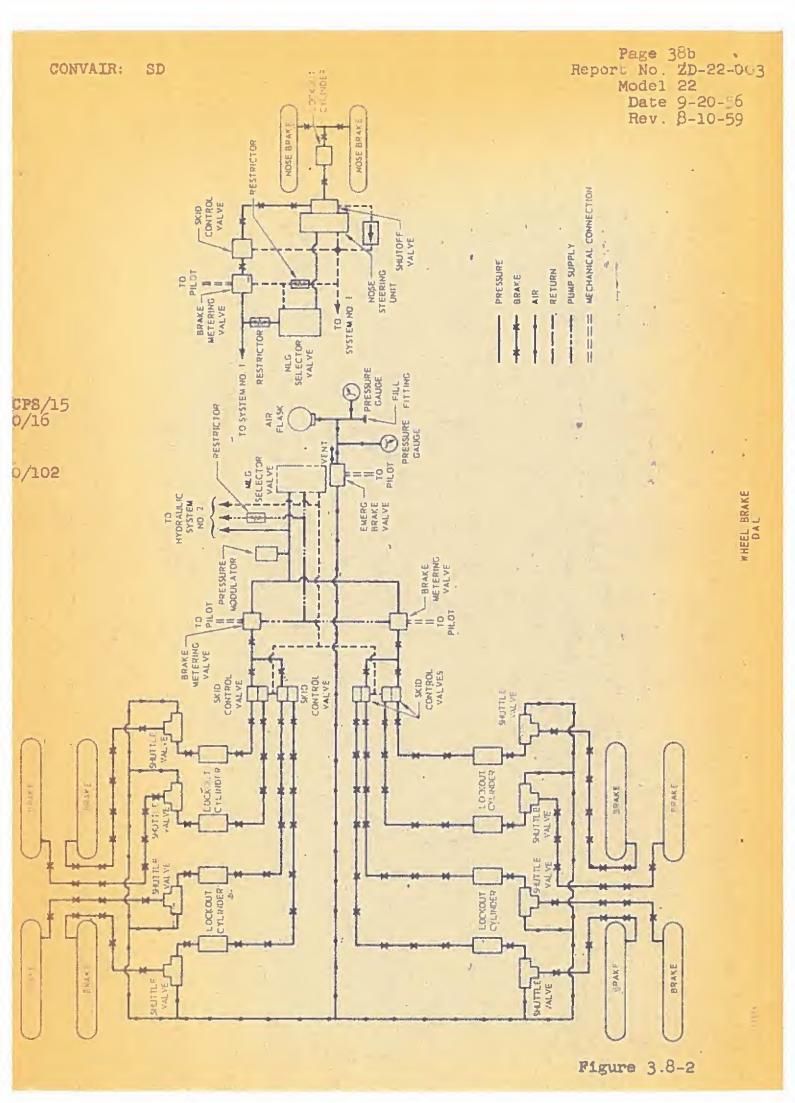
Replace above illustrations in specifications with Enclosures: (A), (B) and (C).

Enclosures: (A) One copy revised Page 38b - WHEEL BRAKE

- (B) One copy revised Page 38c NOSE LANDING GEAR SYSTEM
- (C) One copy revised Page 64a HYDRAULIC SYSTEM

Effect on Weight Empty: 0
Effect on Balance: 0

Effect on Performance: None



Page 38c Report No. ZD-22-003 Model 22

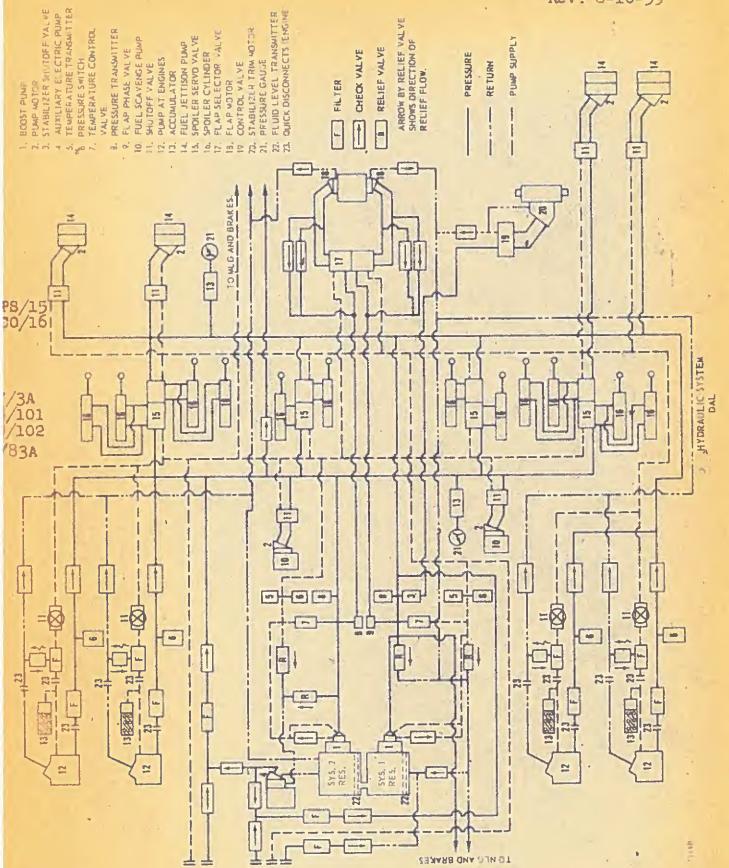
Date 9-20-56 Rev. 8-10-59 TO STEERING TO BRAKES TOPILOT ANT -SKID BRAKE WE TERING VALVE RESTRICTOR TO HYD SYSTEM NO. 1 PS/15 CO/16 RESTRICTOR NLG SELECTOR VALVE TO PILOT TO PILOT RESTRICTOR RELIEF VALVE PRIORITY 1 VALVE NLG CYLINDER RESTRICTOR - PRESSURE ---- RETURN H H BRAKE ==== = WECHANICAL CONNECTION NEG UPLATCH CYL.

NOSE LANDING GEAR SYSTEM DAL

NEG DOOR UPLATCH CYL.

NLG DOOR SEQUENCE VALVE

Page 64a
Report No.ZD-22-003
Model 22
Date 9-20-56
Rev. 8-10-59



A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO. ZD- 22-003 | | DATE: | | |
|--|---|--|--|--|
| CUSTOMER: Delta Air | Lines Inc. | MCL 10,457 DTD | | |
| CHANGE NO: 268 | | MODEL: 22-2 (Convair "880") | | |
| TITLE: Specificat | ion Administrativ ng light switches | ve Change (Deletion of placards | | |
| ORIGIN: Convair in | nitiated. | | | |
| REASON FOR CHANGE: P | acard for reading | g light switch is not required. | | |
| | | | | |
| EFFECT | N WEIGHT * | EFFECT ON BALANCE* | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | |
| 0 | 0 | O INCH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * Non | ne | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | DN DN | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPLANES AFFECTED: | | |
| | | | | |
| SPECIAL PROVISIONS: | ì | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED: | 5 | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | + | | | |
| DATE | | | | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 268

Title: Specification Administrative Change (Deletion of placards

from reading light switches)

Origin: Convair initiated.

Reason for Change: Placard for reading light switch is not required.

Description of Change:

Page 76, Paragraph 3.16.8.3.4 READING LIGHTS:

Revise the fourth sentence as follows:

From: "The "on-off" switch for each light shall be located adjacent to the light and placarded to clearly indicate

its function."

To: "The "on-off" switch for each light shall be located

adjacent to the light. "

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

A DEVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 DATE: | | | | | | | | |
|---|--|-----------|-----------------------------|---|-----------------------------|--|--|--|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10.433 DTD 2 October 19 | | | | | |
| CHANGE NO: 267 | | MODEL 22- | -2 (Convai | r "880") | | | | |
| TITLE: Nose Wheel | Brake Deactivati | on, I | n sta llation | of Swite | n for | | | |
| ORIGIN: TWA reques | | ropos | ed to Delta | 3 | | | | |
| EFFECT | ON WEIGHT * | | E | FFECT ON BAL | ANCE ° | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | *************************************** | | | | |
| Negligible | Negligible | | Negl | ligible | INCH LB. | | | |
| EFFECT ON GUARANTEED F | ERFORMANCE: * | | | | | | | |
| | None | | | | | | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPO ANGE IS DEPENDENT UPO HE FOLLOWING CHANGES | SAL | J. A. She | ENGINEERII | NG APPROVAL | | | |
| LATEST DATE OF ACCEPTA | NCE: | | ANES AFFECTE | | | | | |
| SPECIAL PROVISIONS: | | RECUR | ECURRING: | | | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION O | F GENERAL DYN | IAMICS CORP. | | | |
| BY: | | | | | | | | |
| DATE: | | | | | 97 - 87 (1, 5, 5, 5-12) 7 A | | | |

Delta Air Lines Inc. Change No. 267

CONVAIR: SD

Title: Nose Wheel Brake Deactivation, Installation of

Switch for

Origin: TWA requested and Convair proposed to Delta

Reason for Change: As above

Description of Change:

Page 36, Paragraph 3.8.4.2 - WHEELS AND BRAKES:

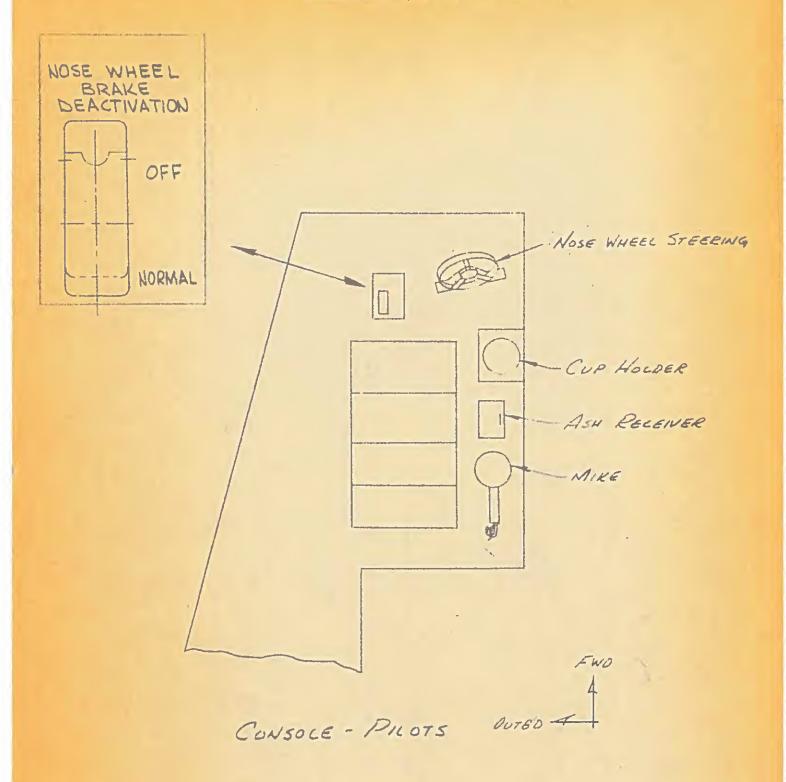
Add the following sentence, after the third sentence:

"A switch shall be provided to electrically close the normally open anti-skid valve in the hydraulic supply line to the nose wheel brakes, to block off hydraulic pressure in the event of malfunction.

Enclosure: (A) One copy of Convair Sketch - SK-102659-2, Switch & Placard - Nose Wheel Brake Deactivation (For information only)

Effect on Weight Empty: Negligible Effect on Balance: Negligible

Effect on Performance: None



SWITCH & PCACARO -NOSE WHEEL BRAKE DEACTIVATION DELTA

SK 102659-2

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DILGO, CALIFORNIA

COMMERCIAL CHANGE PROPOSAL

| SPEC NO. ZD- 22-003 | | | DATE: | | | | |
|--|--------------------|-----------------|--|--|--|--|--|
| CUSTOMER. Delta Air | Lines Inc | MCL 10.431 DTD | | | | | |
| CHANGE NO: 266 | | | MODEL: 22-2 (Convair "880") | | | | |
| TITLE: ATC Transp | onder Units, Custo | omer I | Furnished, Installation of | | | | |
| ORIGIN: Delta verbal request (C.J. May to S.J. Harris) on 1 October 1959 | | | | | | | |
| REASON FOR CHANGE: | Customer request | t | , | | | | |
| | | | | | | | |
| EFFECT | ON WEIGHT * | - | EFFECT ON BALANCE * | | | | |
| | OPER, WT. EMPTY | | i i i e i on anama | | | | |
| +48.0 lbs | +48.0 lbs | | +12,960 INCH LB. | | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | | |
| | None | | | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A | | | | | | | |
| PRIOR ACCEPTANCE OF THE | | | A. H. Shark ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTAIN | NCE: | AIRPL | RPLANES AFFECTED: | | | | |
| RECL NON- | | RECUR NON-RE | EFFECT ON PRICE PER AIRPLANE; RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| B 9 | | | | | | | |

TENDER THE THE

CATES

Delta Air Lines Inc. Change No. 266

Page 1

Title: ATC Transponder Units, Customer Furnished, Installation of

Origin: Delta verbal request (C.J. May to S.J. Harris) on 1 October

1959

Reason for Change: Customer request

Description of Change:

Page 86, Paragraph 3.16.17 - ESSENTIAL POWER:

Add the following item under "Radio - (All)"

"12. ATC Transponder Beacon (Dual)"

Page 90, Paragraph 3.17.1 - EQUIPMENT:

Revise the first sentence to read as follows:

"The following radio and radar systems shall be furnished, except as noted, and installed by the Contractor".

Add the following item to the "Description List":

"Dual - ATC Transponder Beacon System (Customer Furnished)"

Delete the following item under "Complete provisions for the following systems shall be made":

"Dual - ATC Transponder Beacon System"

Page 102, Paragraph 3.17.4.4 - RADAR SAFETY BEACON:

Delete the paragraph and substitute the following:

"A dual - ATC transponder becon shall be installed. Both installations shall conform to ARINC Characteristic No. 532A".

Page A-O, APPENDIX I-A, CUSTOMER FURNISHED-CONVAIR INSTALLED EQUIPMENT:

Add the following item to APPENDIX I-A:

"Dual - ATC Transponder Beacon

@ 24.0 lbs 48.0 lbs."

Effect on Weight Empty: +48.0 Lbs

Effect on Balance +12,960 In/Lbs

Effect on Performance: None

CO WAIR: SD

Delta Air Lines Inc. Change No. 266

Page 2

The following shall not appear in the specification language:

Note: APPENDIX I-A, "CUSTOMER FURNISHED - CONVAIR FURNISHED EQUIPMENT" was originated in CCP No. 264 (Customer Furnished Flight Data Recorders)

SAN UL JO, CALIFORNIA

| SPEC NO. ZD- 22-003 | | | DATE: | | | |
|--|--|--|-----------------------|---------------|----------|--|
| CUSTOMER: Delta Air | Lines Inc. | MCL 10,456 DTD 6 0 | | | | |
| CHANGE NO: 265 | | MODEL: 22-2 (Convair "880") | | | | |
| TITLE: Corrosion Pr Surfaces, Ap | reventive Coating plication of | to Ex | terior Alumin | um Alloy | | |
| ORIGIN Convair ini | tiated | | | | | |
| REASON FOR CHANGE: a. | To provide an exserviceable, repunpainted skins. | airab | | | | |
| b. | Optimum corrosio | on pro | tection of th | e airplan | е. | |
| EFFECT | ON WEIGHT " | | EFFE | CT ON BALANC | CE * | |
| GUAT. WT. EMPTY | OPER. WT. EMPTY | | | | | |
| +100.0 lbs | +100.0 lbs | | +5 | 98,800 | INCH LB. | |
| EFFECT ON GUARANTEED F | ERFORMANCE: None | | | | | |
| MEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH. PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL N | E | ENGINEERING A | APPROVAL | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ALCEPTED: | | CONV | AIR, A DIVISION OF GE | ENERAL DYNAMI | CS CORP. | |
| BY as no exclusive or the relative of the rela | | | | | | |
| | | | | | | |

Delta Air Lines Inc. Change No. 255

CONVAIR: SD

Title: Corrosion Preventive Coating to Exterior Aluminum Alloy

Surfaces, Application of

Origin: Convair initiated

Reason for Change: See cover sheet.

Description of Change:

This change has no effect on specification language, and consist of painting all bare exterior surfaces, except where peculiar conditions require alternate treatment, and proposes the following points:

a. One coat "Epoxy" prime, Spec. 0-03021- Type I
b. One coat pigmented "Epoxy" top coat, Spec. 0-03021-Type II

(Convair recommends gloss grey to simulate aluminum alloy appearance; however, customer may select desired color without affecting task shown herein)

Effect on Weight Empty: +100.0 lbs Effect on Balance: +98,800 Inch-lbs Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SANSIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DAT | E: | | | |
|--|---|---------------------------------|---------------|---|-----------------------|--------------|
| CUSTOMER: Delta A | ir Lines Inc. | MCL | 10,389 | DTD 29 | October | <u>-1959</u> |
| CHANGE NO: 264 | | MOD | EL: 22-2 | (Convair ' | 1880") | |
| TITLE Custome | r Furnished Flight | t Data Red | corder, I | nstallatio | on of | |
| ORIGIN; Delta v | erbal request 21 S | September | 1959 | ALL | | |
| REASON FOR CHANGE: C | ustomer request | | | | | |
| EFFECT | ON WEIGHT * | | EFFE | CT ON BALAN | CE * | |
| GUAR, WT, EMPTY | OPER. WT. EMPTY | | | | | |
| +32.0 lb | +32.0 lb | | +3 | 31680 | INCH LB. | |
| EFFECT ON GUARANTEED F | PERFORMANCE: * None | | | | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH. PRIOR ACCEPTANCE OF T | SAL | BASimon ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPLANES | AFFECTED: | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED. | | CONVAIR, A D | IVISION OF GE | NERAL DYNAMI | CS CORP. | _ |
| ВҮ: | | | | | | |
| DATE: | | | | CON | IV & 1 4.5. J. 6-1217 | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 264

Title: Customer Furnished Flight Data Recorder, Installation of

Origin: Delta verbal request 21 September 1959.

Reason for Change: Customer request

Description of Change:

Page 62 (Cont), Paragraph 3.14.3.8 - FLIGHT DATA RECORDING PROVISIONS:

Delete the paragraph and paragraph title and substitute the following:

"FLIGHT DATA RECORDER: A Customer furnished Lockheed Air Service Flight Recorder No. 4001550 Model C, and Customer furnished Amplifier No. 4001551 shall be installed with the necessary wiring, static and pitot lines in the hydraulic compartment.

Page 62E, PITOT STATIC SYSTEM SCHEMATIC:

Above illustration will be revised to show Flight Data Recorder.

Page A-O, APPENDIX I-B, FURNISHINGS:

Add the following to Page A-O, over APPENDIX I-B:

"APPENDIX I-A

CUSTOMER FURNISHED - CONVAIR INSTALLED EQUIPMENT:

| Quan Reqd. | Description | • | Manufacturer | Part or Spec. Number | Weight |
|---------------|----------------------|---|------------------------------------|----------------------|-------------------|
| 1 | Flight Data Recorder | | Lockheed Air | 4001550 | 00.0.0 |
| 1 | Amplifier | | Service Lockheed Air Service | (Model C) 4001551 | 28:2 lb 3.8 lb |

Effect on Weight Empty: +32.0 lb

Effect on Balance: +31,680 in/lbs

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|--|--|-------------------------------|----------------------|--------------|------------------|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,423 | DTD19 | August 195 | |
| CHANGE NO: 263A | | | MODEL: 22-2 | (Convair | "880") | |
| TITLE: D-C Ener | gized Ignition Syr | stem, | Installation | of | | |
| | ¥ | | | | | |
| ORIGIN: TWA requ | ested and Convair | prope | osed for Delta | a. | | |
| REASON FOR CHANGE: TO | provide an altern vision to CCP No. | nate : | ignition power | r source, | and | |
| 16 | vision to cor no. | 203. | | | | |
| | | | | | | |
| | ON WEIGHT * | | EFFE | CT ON BALAN | CE ' | |
| GUAR. WT. EMPTY +13.0 lb | OPER. WT. EMPTY | | | | | |
| 412*0 TD | +13.0 11 |) | +4,467 IN | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A | | | | | | |
| ACCEPTANCE OF THIS CHA | ANGE IS DEPENDENT UPO | N | | | | |
| PRIOR ACCEPTANCE OF T | HE FOLLOWING CHANGES: | | 5 | (an | | |
| | | | E | NGINEERING | APPROVAL | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | | |
| | | | | | | |
| SEEGIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: | | | | |
| | | RECURRING: NON-RECURRING: | | | | |
| | | TOTAL | | | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GE | NERAL DYNAMI | CS CORP. | |
| BY: | | | | | | |
| DATE: | | | | 10 | VA11,5.2.6-1217A | |

Delta Air Lines Inc. Change No. 263A

CONVAIR: SD

Title: D-C Energized Ignition System, Installation of

Origin: TWA requested and Convair proposed for Delta.

Reason for Change: To provide an alternate ignition power source, and

revision to CCP No. 263.

Description of Change:

Page 78 (Cont), Add the following new paragraph after Paragraph 3.16.9.1:

"3.16.9.2 IGNITION SYSTEM POWER SOURCE: The ignition system shall normally be energized from an A-C power source; however, a static inverter shall be installed for energizing the ignition system from a D-C power source."

Page 83, Paragraph 3.16.14 BOOSTER COIL:

Delete the paragraph and title and substitute the following:

"3.16.14 IGNITION UNITS: Ignition units (including booster coil) shall be furnished with the engine."

Effect on Weight Empty: +13.0 pounds

Effect on Balance: +4,467 inch-pounds

Effect on Performance: None

The following shall not appear in the specification language:

The static inverter also supplies A-C power to the fuel flow and exhaust gas temperature instrumentation during starting with the alternate source.

EDITISEN OF SENERAL DYNAMICS CORPORATION SAN OH G., CALIFORNIA

| SPEC NO. ZD- 22-003 | | DATE: | | | | |
|---|-------------------|------------------------------|----------------------|-------------|--------------------------|--|
| CUSTOMER. Delta Air Lines Inc. | | | MCL 10,420 | DTD 13 | August 1959 | |
| CHANGE NO. 262 | | | MODEL. 22-2 | (Convair | "880") | |
| TITLE Continuous | Fire Detector Ele | ement | Support Clar | mps, Chang | ge of | |
| | | | | | | |
| ORIGIN: TWA reques | ted and Convair p | ropos | ed for Delta | 0 | | |
| | | | | | | |
| REASON FOR CHANGE: | As above. | | | | | |
| | | | | | | |
| EFFECT | N WEIGHT | | EFFE | ECT ON BALA | NCE * | |
| WIA- WT. EMPTY | OPER. WT. EMPTY | | | | | |
| ≠5.0 lb | √5.0 lb | | ₹4,000 INCH LB. | | | |
| EFFECT ON GUARANTEED P | | | | | | |
| | Non | е | | | | |
| * REGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A | | | | | | |
| ACCEPTANCE OF THIS CHAPRICE ACCEPTANCE OF T | | 4 | | BlAin | nono | |
| | | | | ENGINEERING | APPROVAL | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPLANES AFFECTED: | | | | |
| SPECIAL PROVISIONS. | | EFFECT ON PRICE PER AIRPLANE | | | ., | |
| | | NON-R | RRING: | | | |
| TATCT | | | | | | |
| ACCEPTIT | | CONYA | AIR, A DIVISION OF G | ENERAL DYNA | MICS CORP. | |
| ř | | | | | | |
| (1 | 75 | | | | C-VV-1, V. C. CONT. 17 A | |

Delta Air Lines Inc. Change No. 262

CONVAIR: SD

Continuous Fire Detector Element Support Clamps, Change of Title:

TWA requested and Convair proposed for Delta. Origin:

Reason for Change: As above.

Description of Change:

This proposal has no effect on specification language, and consists of replacing the standard "ADEL" clamps with "FENWAL" quick attach-detach-type clamps.

Effect on Weight Empty: \(\frac{1}{2} \). 0 pounds
Effect on Balance: \(\frac{1}{4} \),000 inch-pounds

Effect on Performance:

None

A DIVISION OF BENERAL DYNAMICS CORPORATION SAN SIE 10, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | DATE: | | |
|---|-------------------------------------|---|----------|--|--|
| CUSTOMER: Delta Air | Lines Inc. | MCL 10,404 DTD 27 Ma | y 1959 | | |
| CHANGE NO: 261 | | MODEL: 22-2 (Convair "8 | 80") | | |
| TITLE: Landing Ge | ar Control Revision | | | | |
| ORIGIN: Convair in | itiated | | | | |
| REASON FOR CHANGE: To provide controls to reset hydraulic system, and restore landing gear to normal operation following emergency extension. | | | | | |
| EFFECT ON WEIGHT * | | EFFECT ON BALANCE | • | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 | 0 | 0 | INCH LB. | | |
| EFFECT ON GUARANTEED F | EFFECT ON GUARANTEED PERFORMANCE: * | | | | |
| None | | | | | |
| **NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL | | | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: COM | | CONVAIR, A DIVISION OF GENERAL DYNAMICS | CORP. | | |
| | | | | | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 261

Title: Landing Gear Control Revision

Origin: Convair initiated

Reason for Change: See cover sheet.

Description of change:

Page 32, Paragraph 3.8.1.2 - CONTROLS:

Add the following after the fourth sentence:

"An integral pawl device shall be installed to hold the emergency gear handle in the "valve-vented" position until moved by the flight crew. Controls shall be installed to reset the hydraulic system and restore the landing gear to normal operating condition following an emergency extension".

Page A-10, APPENDIX I-C, HYDRAULIC EQUIPMENT:

Revise the below items in the Description List as follows:

| From: | | Selector Selector | Bertea Peacock | 39800-5001 51200" |
|-------|--|----------------------|-------------------|------------------------|
| To: | | Selector Selector | Bertea Peacock | 39800-5003 51200-3" |

Add the following item to the Description List:

"1 Valve, Door Open, Emergency Kidde 891507"

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN THE GO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | |
|---|---|---|---|------------|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,456 DTD | |
| CHANGE NO: 260 | | | MODEL: 22-2 (Convair | "880") |
| THILE: Specification reference to visions for) | Administrative Convair production | hange n numb | (VG Recorders, deletipers of airplanes with | on of pro- |
| ORIGIN: Convair in | it1ated | | | |
| | | | duction numbers as aff VG recorder provision | |
| EFFECT ON WEIGHT * | | EFFECT ON BALA | NCE * | |
| GUAR, WT. EMPTY O | OPER. WT. EMPTY O | | 0 | INCH LB. |
| EFFECT ON GUARANTEED F | PERFORMANCE: * None | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOSE ANGE IS DEPENDENT UPO | SAL | ENGINEERING | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | |
| SPECIAL PROVISIONS. | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GENERAL DYNAM | MICS CORP. |
| 8Y: | | | | |
| DATE: | | | | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 260

Specification Administrative Change (VG Recorders, deletion Title:

of reference to Convair production numbers of airplanes with

provisions for)

Origin: Convair initiated

Revision to Convair production numbers as affects Reason for Change:

the airplanes provided with VG Recorder provisions.

Description of Change:

Revise the bottom footnote on Page 62 (cont) as follows:

"**The specific airplanes on which the VG recorder shall From: be installed will be Convair Production airplanes 36, 37, 38 and 40 (Delta airplanes 7,8,9 and 10)"

"**The specific airplanes on which the VG recorder shall To:

be installed will be Delta airplanes 7,8,9 and 10".

Effect on Weight Empty: 0 Effect on Balance: 0 Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS LORPORATION SAN DIE GO, CALIFORNIA

| SPEC NO. ZD- 22-003 | DATE: | | | | |
|--|---|--|--|--|--|
| CUSTOMER: Delta Air Lines, Inc. | MCL 10,454 DTD | | | | |
| CHANGE NO: 259A | MODEL: 22-2 (Convair "880") | | | | |
| TITLE Specification Administrative Change (Miscellaneous Revision to Specification Language) | | | | | |
| DRIGIN: Convair initiated. | | | | | |
| REASON FOR CHANGE: To clarify the intent of the specification, and revision to CCP No. 259. | | | | | |
| EFFECT ON WEIGHT | EFFECT ON BALANCE * | | | | |
| GUAS, WT. EMPTY OPER, WT. EMPTY | | | | | |
| 0 | O INCH LB. | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * | | | | | |
| None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPOF PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES | A 1 1 / A | | | | |
| | ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE. | | | | |
| | RECURRING: NON-RECURRING: | | | | |
| | TOTAL: | | | | |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | | | |
| DATE. | 7 4 7 40 64 - 1 7 A | | | | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 259A

Page 1 of 2

Title: Specification Administrative Change (Miscellaneous

Revision to Specification Language)

Origin: Convair initiated

Reason for Change: To clarify the intent of the specification, and

revision to CCP No. 259.

Description of Change:

Page 58, Paragraph 3.14.1.2 - COPILOT'S INSTRUMENT PANEL:

Add the following item to the instrument list:

"*One indicator, fuel quantity totalizer".

Page 59, Paragraph 3.14.1.3 - ENGINE INSTRUMENT PANEL:

Delete the following item from the instrument list:

"*One indicator, fuel quantity totalizer".

Page 59, Paragraph 3.14.1.4 - FLIGHT ENGINEER'S INSTRUMENTS:

Revise the below item in the instrument list as follows:

From: "Four dc ammeters"

To: "Five do ammeters"

Add: the following item to the Instrument List:

"Two hydraulic fluid temperature indicators"

Page 59A, Paragraph 3.14.1.5 - MISCELLANEOUS INSTRUMENTS:

Delete the below items from the instrument list:

"Two oxygen quantity gages
Three oxygen flow indicators".

Page A-1, APPENDIX I-C, POWER PLANT EQUIPMENT:

Revise the below item under "FUEL SYSTEM EQUIPMENT" as follows:

Delta Air Lines Inc. Change No. 259A

Page 2 of 2

From: "4 Drain Valves, consisting of:

2 Fuel Tank Low Accessory Point Valve Prod.

2 Fuel Line Trap Accessory Valve Prod. 771000"

To: "18 Drain Valves, consisting of:

6 Fuel Tank Low Accessory
Point Valve Prod. 771100

12 Fuel Line Trap Accessory
Valve Prod. 771000"

Page A-7, APPENDIX I-C, INSTRUMENTS AND RELATED EQUIPMENT:

Revise the below items in the Description List as follows:

From: "2 Fuel Quantity Probes Simmonds

30 Fuel Quantity Probes

Aerocess 381056-01277
Simmonds 2 ea. 381056-02278

Aerocess thru 381056-02292

To: "48 Fuel Quantity Probes Simmonds 2 ea. 381056-02280
Aerocess. through

through 381056-02284 381056-02286 381056-02288

771100

through 381056-02293 381056-02143 through

381056-02150 381056-02152 381056-02277

381056-02273 381056-02279

Effect on Weight Empty: 0 Effect on Balance: 0 Effect on Performance: None

A CHARGE CONTACT OF A CONTACT O

| SPLC NO., ZD. 22-003 | | DATE | | | | |
|--------------------------------|---|--|--|--|--|--|
| CUSTOMER. Delta Air Lines Inc. | | MCL 10,453 DTD | | | | |
| CHANGE NO. 258 | | MODEL 22-2 (Convair "880") | | | | |
| Specificat 3.16.2.1.2 | ion Administrativ | e Change (Revision to Paragraph | | | | |
| Convair in | itiated. | | | | | |
| KE ASON FOR CHANGE - | o clarify the int | ent of the specification. | | | | |
| | | | | | | |
| [FFECT 6 | ON WEIGHT . | EFFECT ON BALANCE * | | | | |
| O O | OPER, WT. EMPTY 0 | O INCH LB. | | | | |
| EFFECT ON GUARANTEED F | PERFORMANCE. * | ne | | | | |
| DIALS REFLECTED IN A | L BE ACCUMULATED AND FUTURE CHANGE PROPO | | | | | |
| PRIOR A DOEPT ANCE OF T | | | | | | |
| ATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | | |
| F F - HI PROVERUNG | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING- TOTAL: | | | | |
| * J(SI(3) | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| 1 / | | | | | | |
| | | | | | | |

Delta Air Lines Inc. Change No. 258

CONVAIR: SD

Title: Specification Administrative Change (Revision to Paragraph

3.16.2.1.2)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification.

Description of Change:

Page 65, Paragraph 3.16.2.1.2 CONTROL PANEL:

Revise the paragraph to read as follows:

"A generator control panel for each generator shall have a quick disconnect feature to facilitate replacement. Protection and cooling shall be provided to insure proper generator system operation."

Effect on Weight Empty: 0 Effect on Balance: 0 Effect on Performance: None

A DITISION OF GENERAL DYNAMICS CORPORATION SAN D'E 40, CALIFORNIA

| SPEC NO.: ZD- 22-003 | DATE: |
|---|---|
| CUSTOMER Delta Air Lines Inc. | MCL 10,419 DTD 27 July 1959 |
| CHANGE NO: 256 | MODEL: 22-2 (Convair "880") |
| TITLE. Passenger Cabin and Club Are | a Interior, Changes to |
| ORIGIN: Delta verbal request of 7 June REASON FOR CHANGE: Customer reques | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE |
| GUAR. WT. EMPTY Proposal "A"+17.0 lb Proposal "A" +17. Proposal "B" Negl. Proposal "B" Negl | Proposal "A" 14,161 Inch-Lb. Proposal "B" Negligible 'NCH LB. |
| EFFECT ON GUARANTEED PERFORMANCE.* None | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSED ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPOPRIOR ACCEPTANCE OF THE FOLLOWING CHANGES | DSAL DN - 2 |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| SY | 100 WALLS LILES |

CONVAIR: SD Delta Air Lines Inc. Change No. 256

Title: Passenger Cabin and Club Area Interior, Changes to

Origin: Delta verbal request of 7 July 1959

Reason for Change: Customer request

Description of Change:

PROPOSAL "A"

This proposal has no effect on specification language, and consists of removing gold mylar under valance lights in passenger cabin and clubarea, and replacing with a valance trim panel covered with ten-ounce vinyl coated fibreglas, or aluminum valance trim. Customer finish specification will be revised to show this change on approval of this proposal. CC 1374 Tile Orange is proposed for club area window valance trim color; and CC 1327 Sungold (257403) is proposed for cabin window valance trim color. Samples of these trim materials will be provided for customer inspection.

Effect on Weight Empty: +17.0 Lbs

Effect on Balance: +14,161 Inch-Lbs

Effect on Performance: None

PROPOSAL "B"

This proposal has no effect on specification language, and consists of deleting pip pin retention strap from club area seat legs.

Effect on Weight Empty: Negligible Effect on Balance: Negligible

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIL GO, CALIFORNIA

| SPEC NO.: ZD-22-003 | DATE: | | | | |
|---|---|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,417 DTD 2 July 1959 | | | | |
| CHANGE NO: 255 | MODEL: 22-2 (Convair "880") | | | | |
| TITLE Fuel Gaging System, Revision | n to | | | | |
| | | | | | |
| | | | | | |
| ORIGIN: TWA requested and Convair p | roposed for Delta | | | | |
| REASON FOR CHANGE: As above | | | | | |
| | | | | | |
| Y | | | | | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE ' | | | | |
| GUAR, WT. EMPTY Proposal "A" Negl Proposal "A" Neg | Proposal "A" Negligible Inch-Lb Proposal "B" +300 Inch-Lb | | | | |
| Proposal "A" Negl. Proposal "A" Neg Proposal "B"+1.0 lb Proposal "B"+1.0 Proposal "C"+1.0 lb Proposal "C"+1.0 | lb Proposal "C" +300 INCH LB. | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * | EFFECT ON GUARANTEED PERFORMANCE: * | | | | |
| None | | | | | |
| TOTALS REFLECTED IN A FUTURE CHANGE PROPO | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO | | | | | |
| PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES | · Clarge | | | | |
| | J. H. Sharp ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | | |
| | | | | | |
| SPECIAL PROVISIONS | EFFECT ON PRICE PER AIRPLANE: | | | | |
| | RECURRING: NON-RECURRING: | | | | |
| | TOTAL: | | | | |
| ACCEPTED | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY. | | | | | |
| DATE: | Trêvalle , chapta | | | | |

Delta Air Lines Inc. Change No. 255

Page 1 of 2

Title: Fuel Gaging System, Revision to

Origin: TWA requested and Convair proposed for Delta

Reason for Change: As above

Description of Change:

PROPOSAL "A"

Page A-7, APPENDIX I-C, INSTRUMENTS AND RELATED EQUIPMENT:

Revise the below items in the Description List as follows:

| From: | "2 | Fuel Quantity Repeater | Indicator | Simmonds Aerocess. | 38309 | 3-01 | 81 |
|-------|----|---------------------------------|----------------|-----------------------|-------|-------|-----------|
| | 2 | Fuel Quantity Repeater | Indicator | Simmonds Aerocess. | 38309 | 3-01) | ,32 |
| | 2 | | Ind. (Counter- | Simmonds Aerocess. | 39302 | 2-01 | 61 |
| | 5 | Fuel Quantity Pointer-Type) | Ind. (Counter- | Simmonds Aerocess. | 39302 | 2-01; | ,82" |
| To: | "2 | Fuel Quantity Repeater | Indicator | Simmonds Aerocess. | (P/N | to be | suppli |
| | 5 | Fuel Quantity Repeater | Indicator | Simmonds Aerocess | (P/N | to be | supple |
| | 2 | Fuel Quantity Tank No. 1 & 1 | | Simmonds Aerocesa | (P/N | to bo | suppl |
| | 2 | Fuel Quantity Tank No. 2 & 1 | | Simmonds Aerocess | (P/N | to be | eiloqua e |

Effect on Weight Empty: Negligible

Effect on Balance: 0 Effect on Performance: None

The following shall not appear in the specification language:

The proposed fuel indicators will be designed to accept the Series 67 amphenol connectors in lieu of the Series 165 connectors.

CONVAIR: SD

Delta Air Lines Inc. Change No. 255

Page 2 of 2

PROPOSAL "B"

Same as Proposal "A" except, includes the installation of four in-line maintenance disconnects in the co-axial wiring which does not effect the specification language.

Effect on Weight Empty: +1.0 Lb

Effect on Balance: +300 Inch-Lbs.

Effect on Performance: None

PROPOSAL "C"

This proposal has no effect on the specification language and consists only of the installation of four in-line maintenance disconnects in the co-axial wiring, retaining the existing Series 165 connectors.

Effect on Weight Empty: +1.0 Lb.

Effect on Balance: +300 Inch-Lbs

Effect on Performance: None

A . . . J N DE W ME AL DYNAMILS TOP TORATION 4

| SPEC NO. ZD. 22-003 | | DATE: | | | |
|---|---|--|--|--|--|
| CUSTOMER Delta Air | Lines Inc. | MCL 10.451 DTD | | | |
| CHANGE NO 254 | | MODEL: 22-2 (Convair "880") | | | |
| Specificati 3.12.9.12 | on Administrative and 3.14.3.6) | Change (Revision to Paragraphs | | | |
| TRIGH: Convair initiated | | | | | |
| REASON FOR CHANGE: | o clarify the inte | ent of the specification | | | |
| EFFECT | ON WEIGHT " | EFFECT ON BALANCE | | | |
| G. F. WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 . | 0 | O INCH LB. | | | |
| EFFECT ON GUARANTEED F | EFFECT ON GUARANTEED PERFORMANCE: None | | | | |
| TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL. | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | |
| TVPUC!AL PROVISIONS | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| aY: | | | | | |
| L. A. T. S. | | * THYSICAL GALLS | | | |

Title: Specification Administrative Change (Revision to Paragraph

3.12.9.12 and 3.14.3.6)

Origin: Convair initiated.

Reason for Change: To clarify the intent of the specification

Description of Change:

Page 53, Paragraph 3.12.9.12 - FUEL TEMPERATURE INDICATION:

Revise the paragraph to read as follows:

"Five sensing elements shall be installed to transmit fuel temperatures. One shall be so located in the fuel tank that the temperature indicated shall be the most critical from a freezing standpoint. One indicator shall be used in connection with a selector switch to indicate fuel inlet temperature to each engine fuel filter and the fuel tank."

Page 62, Paragraph 3.14.3.6 - INSTRUMENT LINES AND CONNECTIONS:

Revise the first sentence as follows:

From: "Instrument lines shall be color coded in accordance with Design Drawing No. AND10375."

To: "Instrument lines shall be color coded in accordance with Standard AND10375."

Revise the ninth sentence as follows:

From: "Flexible connections shall incorporate 1/4 inch hoses on the static side and 3/16 inch hose on the pitot side."

To: "Flexible connections shall incorporate 1/4-inch hoses, with different size fittings to prevent cross connection."

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN LIL GO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | | |
|--|---|---|--|--|--|--|
| CUSTOMER Delta Air Lines Inc. | | | MCL 10,350 DTD | | | |
| CHANGE NO 253 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specification Administrative Change (Revision to Electronic and Electrical Component Cooling) | | | | | | |
| DRIGIN: Convair initiated. | | | | | | |
| REASON FOR CHANGE: | Product improvemen | nt. | | | | |
| | | | | | | |
| EFFECT | N WEIGHT . | | EFFECT ON BALANCE | | | |
| GUAF, WT. EMPTY | OPER, WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * | | | | | | |
| | None | | | | | |
| I . | * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | J. A. Sharp ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPL | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS; | | EFFECT ON PRICE PER AIRPLANE. RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| 6Y: | | | | | | |
| DATE | | | 2.7.5 | | | |

CONVAIR: SD

Delta Air Lines Inc. Change No. 253

Title: Specification Administrative Change (Revision to Electronic

and Electrical Component Cooling)

Origin: Convair initiated.

Reason for Change: Product improvement.

Description of Change:

Page 122A, FIGURE 3.20-1 AIR CONDITIONING PRESSURIZATION SYSTEM:

Above illustration to be revised to show the effects of this proposal.

Enclosure: (A) One copy of Convair Sketch - AIRLFOW PATTERN SHOWN FOR NORMAL INFLIGHT MODE (For information only)

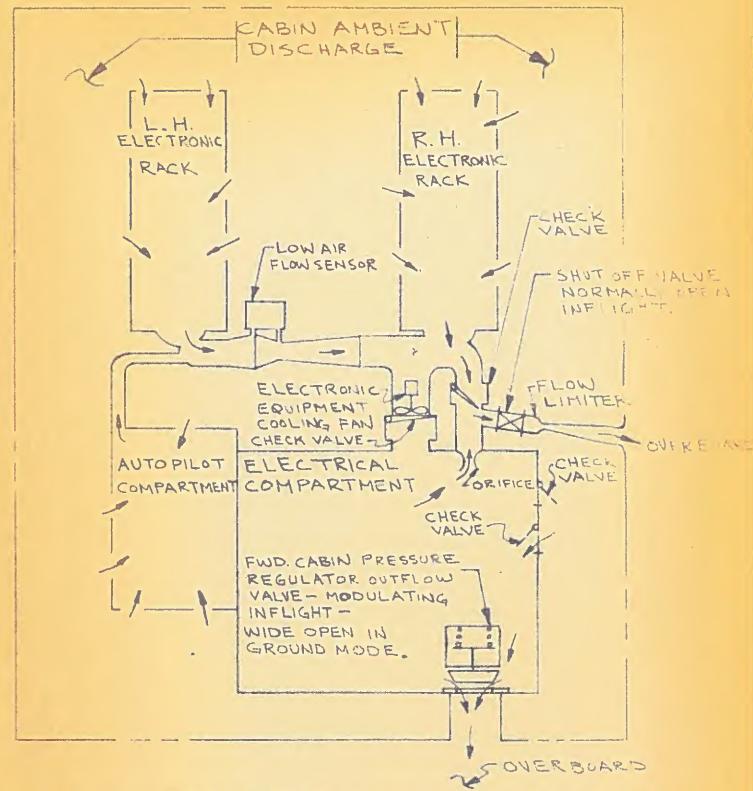
Enclosure: (B) One copy of Convair Sketch - ELECTRICAL EQUIPT COOLING VALVE LOCATION (For information only)

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

The following shall not appear in the Specification language:

The system is being redesigned to provide an overboard discharge duct, shut-off valve and Venturi from the electrical and electronic compartments. The overboard discharge duct will provide cooling during flight except at low altitudes when the cabin pressure differential is low. On the ground and during the low altitude conditions the present electronic cooling blower will be used. A shut-off valve will be provided in the discharge line which will be open at all times. This valve can be closed by a switch on the flight engineer's panel at the option of the crew when and if required in the event of loss of normal air flow to the cabin. The cabin pressure system will be revised to eliminate the differential bias. Its operation will be completely independant of the electronic cooling system. Enclosure (A) defines the proposed arrangement.

MODEL ZZELECTRONIC COOLING



AIRFLOW PATTERN SHOWN FOR NORMAL INFLIGHT MODE.

A DI TUVA OF GENERAL DYNAMICS CORPORATION SAN CH. GO., CALIFURNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | |
|--|---------------------------------|---|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10, 349 DTD | | | |
| CHANGE NO. 252 | | MODEL: 22-2 (Convair "880") | | | |
| | ion Administrative Par. 3.16.6) | ve Change (Delete "WIRELON" designa- | | | |
| ORIGIN. Convair initiated. | | | | | |
| RYASON FOR CHANGE. Pr | oduct improvement | | | | |
| EFFECT (| ON WEIGHT . | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 | 0 | O INCH LB. | | | |
| F FFECT ON GUARANTEED F | PERFORMANCE: * None | | | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A | | | | | |
| ACCEPTANCE OF THIS CH PRIOR ACCEPTANCE OF T | | | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| *CCEPTED | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY. | | | | | |
| DATE: | | 71 Mary 60 Ha | | | |

CONVAIR: SD Delta Air Lines Inc. Change No. 252

Title: Specification Administrative Change (Delete "WIRELON"

designation from Par. 3.16.6)

Convair initiated. Origin:

Reason for Change: Product improvement.

Description of Change:

Page 70, Paragraph 3.16.6 BONDING AND SHIELDING:

Revise the second sentence as follows:

"Bonding exposed to the windstream shall be "Wirelon" or From:

equivalent.

"Bonding exposed to the windstream shall be in accordance with MS-25083." To:

Effect on Weight Empty: Effect on Balance: Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|--|--------------------|----------------------------------|----------------------------------|--------------------|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,414 DTD 2 July 1959 | | | |
| CHANGE NO: 251A | | MODEL: 22-2 (Convair "880") | | | | |
| TITLE: Engine Ignition Switch, Revision to | | | | | | |
| ORIGIN: TWA requested and Convair proposed for Delta | | | | | | |
| REASON FOR CHANGE: C | ustomer request fo | or rev | vision to CCP No. 251. | 4 | | |
| | | | | 17 | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANC | CE* | | |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | | | | |
| 0 | 0 | | 0 | INCH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | |
| | None | | 1 | Alle Services | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A | | | 1 | | | |
| ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF T | | | B/Sin ENGINEERING | | | |
| | | 1 | | THOTAL | | |
| LATEST DATE OF ACCEPTANCE: | | | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: | | | | |
| | | RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | ACCEPTED: | | IR, A DIVISION OF GENERAL DYNAMI | CS CORP. | | |
| BY: | | | | . 1 | | |
| DATE: | | | | VAIR, S.O. 6-1217A | | |

Delta Air Lines Inc. Change No. 251A

CONVAIR: SD

Title: Engine Ignition Switch, Revision to

Origin: TWA requested and Convair proposed for Delta

Reason for Change: Customer request for revision to CCP No. 251.

Description of Change:

Page 56A, FIGURE 3.12-1 - ENGINE STARTING SYSTEM:

Revise above illustration to show fixed position switch in lieu or a momentary switch.

Effect on Weight Empty: O
Effect on Balance: O
Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| CUSTOMER: Delta Air Lines Inc. | MCL 10.348 DTD | | | | |
|--|---|--|--|--|--|
| CHANGE NO: 250A | MODEL: 22-2 (Convair "880") | | | | |
| TITLE: Specification Administrative Change (Revision to Engine Installation Interchangeability) | | | | | |
| ORIGIN. Convair initiated. | | | | | |
| REASON FOR CHANGE: To clarify the intent of Paragraphs 3.11.7 and 3.23.1, and revision to CCP No. 250 | | | | | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE * | | | | |
| GUAR, WT. EMPTY OPER, WT. EMPTY | | | | | |
| 0 0 | O INCH LB. | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AN TOTALS REFLECTED IN A FUTURE CHANGE PROPORTION ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPPRIOR ACCEPTANCE OF THE FOLLOWING CHANGE | ON SAL SALLES APPLIES | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: | | | | |
| | RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | | | |
| EATE. | TONV 410,5,3, 6-1217 A | | | | |

CONVAIR: SD

Title: Specification Administrative Change (Revision to Engine Instal-

lation Interchangeability)

Origin: Convair initiated.

Reason for Change: To clarify the intent of Paragraphs 3.11.7 and 3.23.1,

and revision to CCP No. 250.

Description of Change:

Page v, INTRODUCTION:

Revise the first sentence in the second paragraph to read as follows:

"The four General Electric CJ-805 turbojet engines are completely interchangeable and replaceable as complete engine assemblies except as noted in Paragraph 3.11.7".

Page 44, Paragraph 3.11.7 INSPECTION AND MAINTENANCE:

Revise the last sentence as follows:

From: "Each engine installation shall be completely interchangeable and replaceable as a complete engine assembly, except that certain engine accessories may not be required on each engine installation".

To: "Each engine installation shall be interchangeable and replaceable as a complete engine assembly, except that certain engine accessories, such as provisions for ground in-line combustor, may not be required on each engine installation, and the thrust reverser cascade configuration must be selected for each pod to minimize ingestion".

Page 125, Paragraph 3.23.1 EQUIPMENT INTERCHANGEABILITY:

Revise the below item under "2. Interchangeable Without Alterations" as follows:

From: "Engine (Quick Change)"

To: "Engine (Quick Change, except as noted in Paragraph 3.11.7)"

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

A PLASTON OF THNERAL DYNAMICS CORPORATION SAN DIEGO, CALLFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|---|---------------------|---|---|--|--|--|
| CUSTOMER Delta Air Lines Inc. | | MCL 10.347 DTD | | | | |
| CHANGE NO: 249 | | | MODEL 22-2 (Convair "880") | | | |
| TITLE: Specification Administrative Change (Revision to Interchangeability of Crew and Passenger Seat Items) | | | | | | |
| ORIGIN Convair initia | ated | | | | | |
| REASON FOR CHANGE: To clarify the interchangeability status of crew and passenger seat items | | | | | | |
| EFFECTON | WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY _ C | O OPER. WT. EMPTY O | | O INCH LB. | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | F. H. Shark ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | | |
| REC | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING- TOTAL: | | | | |
| CON | | CONVA | VIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |

Delta Air Lines Inc. Change No. 249

CONVAIR: SD

Specification Administrative Change (Revision to Title:

Interchangeability of Crew and Passenger Seat Items)

Origin: Convair initiated

Reason for Change: To clarify the interchangeability status

of crew and passenger seat items.

Description of Change:

Page 126, Paragraph 3.23.1 - EQUIPMENT INTERCHANGEABILITY:

Revise the below item under "2 Interchangeable Without Alterations" as follows:

From: "Crew and Passenger Seat and Back Cushions and Arm Rest Covers".

"Passenger Seat Covers, Cushions and Arm Rests". To:

the following under "2 Interchangeable Without Alterations". Add "Crew Seat Covers (upholstery) and Arm Rests

Effect on Weight Empty: 0 Effect on Balance: Effect on Performance: None

A IT IS UP A POPULAR DYNAMICS CORPORATION A POST CALIFORNIA

| SPEC NO. 20-22-003 | | DATE | | | | | |
|--|---------------------|---|----------------|-----------|------------|--------------|-------------------------------------|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10.346 DTD | | | | |
| CHANGE NO. 248 | | | MODEL: | 22-2 | (Convai | r · | 1880") |
| TITLE Specifica | tion Administrativ | re Cha | nge (Cha | ange 0 | -09100 t | 0 0 |)-09001) |
| ORIGIN. Convair i | nitiated. | | | | | | |
| REASON FOR CHANGE: T | o correct typograp | hical | error. | | | | |
| EFFECT | ON WEIGHT . | | | EFFEC | T ON BALA | NCE | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | | |
| О | o | | | | 0 | | INCH LB. |
| EFFECT ON GUARANTEED F | PERFORMANCE . None |) | | | | | |
| TOTAL REFLECTED IN A | FUTURE CHANGE PROPO | SAL | | | | | n in diskupaning property of grands |
| ACCUPTINCE OF THIS CH PRIOR ACCEPTANCE OF T | | | | ET | IGINEERING |) . ~ | PROVAL |
| LATEST DATE OF ACCEPTANCE: | | AIRPL | ANES AFFE | CTED: | | | |
| STECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCOPTEC: | | CONVA | IR, A DIVISIO | IN OF GEN | ERAL DYNA | MICS | CORP. |
| 13 Y · | | | | | | | |
| tare: | | | | | | | |

Title: Specification Administrative Change (Change 0-09100 to 0-09001)

Origin: Convair initiated.

Reason for Change: To correct typographical error.

Description of Change:

Dolote "0-09100" where appearing in the following paragraphs, and substitute "0-09001":

Page 66, Paragraph 3.16.3, in third line.

Page 67, Paragraph 3.16.5.1, in fourth line.

Page 68, Paragraph 3.16.5.6, in third line.

Page 70, Paragraph 3.16.6, in fourth line.

Page 92, Paragraph 3.17.1.3, in second line.

Paragraph 3.17.1.3.2, in third line.

Page 94, Paragraph 3.17.1.3.8, in second line.

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

Similarly the second of the s

| SPEC NO. 7D- 22-003 | t a water which from domining. Antenders and supplying stages and participates and | DATE | | | |
|---|--|--|--|--|--|
| CUSIOMER Delta Air Lines Inc. | | MCL 10,345 DID | | | |
| Charl = 110 - 2117 | | MODEL: 22-2 (Convair "880") | | | |
| Specification Power of HF T: | Administrative ransmitter) | e Change (Revision to Essential | | | |
| OR -N Convair initia | ated. | TOTAL BY THE THE PARTY OF THE P | | | |
| radio | bus, as Delta | itter from Essential D-C Power HF Communication system does er for operation. | | | |
| EF FECT ON WE | IGHT · | EFFECT ON BALANCE | | | |
| OPE | R. WT. EMPTY O | O INCH LB. | | | |
| LIFECT ON GUARANTEED PERFO | RMANCE: * | | | | |
| # 274 or to 1 top 1 - # milety 1001 for Pirener areason trip to beigh him projektichten | None | | | | |
| THE THE RESERVENCE OF THE FO | IRE CHANGE PROPOS IS DEPENDENT UPOR | SAL N | | | |
| LATEST LATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | |
| FRESIGN PRIVISIONS: | | FFFECT ON PRICE PER AIRPLANE. RECURRING- NON-RECURRING: TOTAL. | | | |
| | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| | | | | | |

Title: Specification Administrative Change (Revision to Essential

Power of HF Transmitter)

Origin: Convair initiated.

Reason for Change: To delete HF transmitter from Essential D-C Power

radio bus, as Delta HF communication system does

not require D-C power for operation.

Description of Change:

Page 86, Paragraph 3.16.17 ESSENTIAL POWER:

Delete the following item under "Radio (ALL)", and renumber the remaining items 1 through 11:

"3. HF Transmitter"

Page 96, Paragraph 3.17.1.7.1 D-C POWER CONTROL:

Revise the fourth sentence as follows:

From: "The dc power controlled by the "Essential" switch shall supply the No. 2 VHF communication equipment, the No. 1 VHF navigation equipment and the HF equipment."

To: "The d-c power controlled by the "Essential" switch shall supply the No. 2 VHF communication equipment and the No. 1 VHF navigation equipment."

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

A DIVISION OF GENERAL SYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | |
|--|-------------------------------------|---|------------------------------|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,344 DTD | |
| CHANGE NO. 246 | | | MODEL: 22-2 (Convair "880") | |
| TITLE: Specificati part number | on Administrative | Chang | ge (Revision to landing gear | |
| ORIGIN: Convair ini | tiated. | | | |
| REASON FOR CHANGE: To clarify part numbers of certain items of landing gear equipment. | | | | |
| EFFECT | ON WEIGHT * | 1 11 11 11 11 | EFFECT ON BALANCE * | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | |
| 0 | 0 | | O INCH LB. | |
| EFFECT ON GUARANTEED P | EFFECT ON GUARANTEED PERFORMANCE: * | | | |
| | None | е | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | ENGINEERING APPROVAL | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED (| | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | |
| DATE. | | | | |

CONVAIR: SD

Title: Specification Administrative Change (Revision to landing gear

part-numbers)

Origin: Convair initiated.

Reason for Change: To clarify part numbers of certain items of landing

gear equipment.

Description of Change:

Page A-11, APPENDIX I-C, LANDING GEAR EQUIPMENT:

Revise the below items as follows:

| From: | 1883121 | Main Main Nose Nose | Oleo Shock Strut Wheels Wheel Brakes Wheel Shock Strut Wheels Wheel Brake | Cleveland Pneum. Goodyear Cleveland Pneum. Goodyear Goodyear | 9541333 PD860 9560393 PD860 8K 9772 9541334 PD875 9560394 PD875" |
|-------|---------|------------------------------|---|--|--|
| To: | "288122 | Main Main Nose Nose | Oleo Shock Strut Wheels Wheel Brakes Wheel Shock Strut Wheels Wheel Brakes | Cleveland Pneum. Goodyear Cleveland Pneum. Goodyear Goodyear | 9729A 9541333 9560393 9772A 9541334 9560394" |

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

A DIVISON OF GENERAL DYNAMICS CORPORATION SAN DISEGO CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: |
|--|--------------------------------|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,343 DTD |
| CHANGE NO: 245A | | MODEL: 22-2 (Convair "880") | |
| TITLE: Specificati pressure re | on Administrative gulator P/N) | Chang | e (Revision to bleed air |
| ORIGIN: Convair ini | tiated. | | |
| r | | of pa | number for bleed air pressure rt number submitted by CCP CCP No. 245 |
| EFFECT ON WEIGHT * | | | EFFECT ON BALANCE * |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | |
| 0 | 0 | | O INCH LB. |
| EFFECT ON GUARANTEED | PERFORMANCE: * | | |
| | None | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ACCEPTANCE OF THE FOLLOWING CHANGES: ACCEPTANCE OF THE FOLLOWING CHANGES: ACCEPTANCE OF THE FOLLOWING CHANGES: | | | JA. Sharp ENGINEERING APPROVAL |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE RECURRING: NON-RECURRING: TOTAL: | |
| ACCEPTED | | CONVAIR, A DIVISION OF BENERAL DYNAMICS CORP. | |
| ВҮ | | | |
| DATE | | | |

Delta Air Lines Inc. Change No. 245A

CONVAIR: SD

Title: Specification Administrative Change (Revision to bleed air

pressure regulator P/N)

Origin: Convair initiated.

Reason for Change: To furnish revised part number for bleed air pres-

sure regulator, in lieu of part number submitted

by CCP No. 178; and revision to CCP No. 245.

Description of Change:

This change has no effect on Specification language.

Effect on Weight Balance: 0

Effect on Balance: 0

Effect on Performance: None

The following shall not appear in the Specification language:

The below is the change to the part number of subject regulator. All other items submitted by CCP No. 178 remain unchanged.

From: "Press. Reg. 108590-400 (Convair P/N 22-02462 Bleed Air Pressure Regulator and Shut-Off Valve)"

To: "Fress. Reg. 108972-400-2 (Convair P/N 22-02462-7 Bleed Air Pressure Regulator and Shut-Off Valve)"

FOR THE GO, CALIFORNIA

| SPEC NO.: 20-22-003 | | | DATE: | |
|---|-----------------|--|-------------------------------------|--|
| CUSTOMER Delta Air Lines Inc. | | MCL 10,342 DTD | | |
| CHANGE NO: 2144 | | MODEL. 22-2 (Convair "880") | | |
| Specification Administrative Change (Revision to main landing gear schematic) | | | | |
| ORIGIN Convair initiated. | | | | |
| REASON FOR CHANGE: To incorporate an up to date Main Landing Gear System schematic. | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE * | |
| GUAR. WT. EMPTY | OPER. WT. EMPTY | | | |
| 0 | 0 | | O INCH LB. | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: T.A. Aho | | | F. A. Shorp ENGINEERING APPROVAL | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTHO: | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| 3Y: | | | | |
| LATE | | | -07 MAI 2, 3, - 0-1211 A | |

Delta Air Lines Inc. Change No. 244

CONVAIR: SD

Title: Specification Administrative Change (Revision to main landing

gear schematic)

Origin: Convair initiated.

Reason for Change: To incorporate an up to date Main Landing Gear System

schematic.

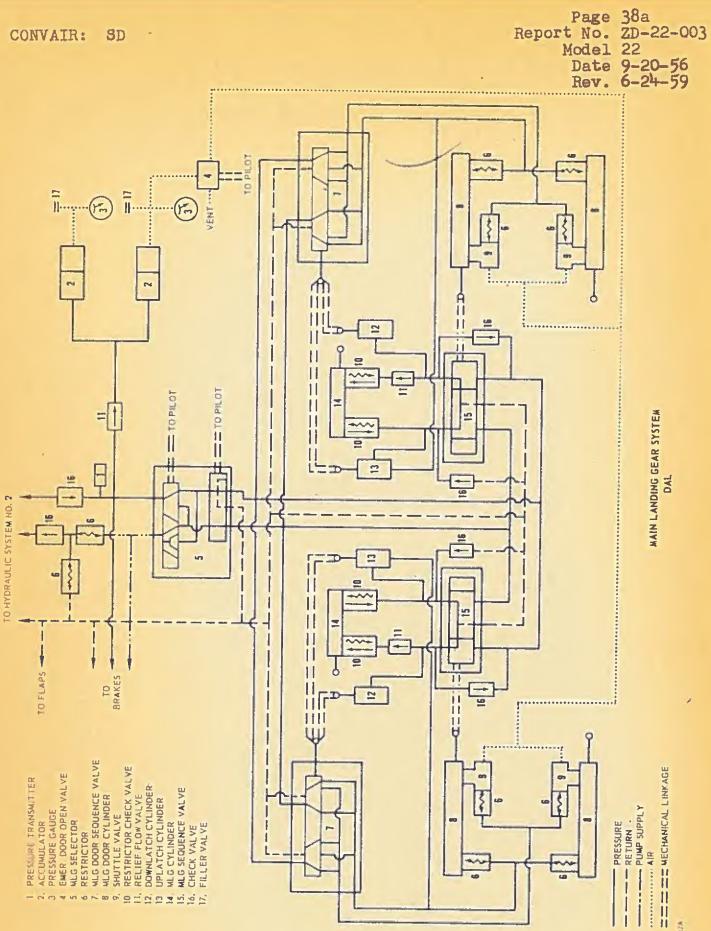
Description of Change:

Page 38a, FIGURE 3.8-1 MAIN LANDING GEAR SYSTEM:

Replace above illustration in specification with Enclosure (A).

ENCLOSURE: (A) One copy FIGURE 3.8-1 MAIN LANDING GEAR SYSTEM (Revised)

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None



A DIVISION OF GENERAL DYNAMICS COMPONATION SAN DIFFO, CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE: | |
|--|--------------------|---|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,406 DTD | |
| CHANGE NO: 243 | | | MODEL: 22-2 (Convair "880") | |
| TITLE: Ice-Detect | or Units, Deletion | of F | rom No. 2 and No. 4 Pods | |
| ORIGIN: Convair in | itiated. | | | |
| REASON FOR CHANGE: Product improvement. | | | | |
| | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE | |
| | OPER, WT. EMPTY | | | |
| -7.0 lb | -7.0 lb -7.0 lb | | -5,690 INCH LB. | |
| EFFECT ON GUARANTEED PERFORMANCE: 1 None | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | Of Simon ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | |
| ВҮ. | | | | |
| DATE: | | | 1917(4) ₁₀₀ 602114 | |

Delta Air Lines Inc. Change No. 243

CONVAIR: SD

Title: Ice-Detector Units, Deletion of From No. 2 and No. 4 Pods

Origin: Convair initiated.

Reason for Change: Product improvement.

Description of Change:

Page 122, Paragraph 3.20.2.5 ICE DETECTOR SYSTEM:

Revise the paragraph to read as follows:

"An ice-detector system shall be installed with warning lights in the pilot compartment. Two detector units shall be installed; one in the No. 1 pod and one in the No. 3 pod. Automatic control of the airplane anti-icing system shall be provided; operated by either of the ice detector units. Provisions shall be made for the installation of one ice detector unit in No. 2 pod and one in No. 4 pod."

Page A-1, APPENDIX I-C, POWER PLANT EQUIPMENT:

Revise the below item as follows:

From: "4 Ice Warning Detector Goodyear 3065-1802

(CARL) Type T260-MK12A"

To: "2 Ice Warning Detector Goodyear 3065-1802

(C.A.R.L.) Type T260-MK12A"

Effect on Weight Empty: -7.0 pounds

Effect on Balance: -5,690 inch-pounds

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | |
|---|-------------------------------------|--|---|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,405 DTD 3 June 1959 | | |
| CHANGE NO: 242 B | | | MODEL: 22-2 (Convair "880") | | |
| TITLE: Air Condit | ioning System, Rev | /isior | n to | | |
| ORIGIN: Convair initiated . | | | | | |
| REASON FOR CHANGE: \$ | ee second sheet | | | | |
| TI | - | | | | |
| EFFECT ON WEIGHT * | | | EFFECT ON BALANCE * | | |
| GUÁR. WT. EMPTY | OPER, WT, EMPTY | | | | |
| -10.0 lb | -10.0 lb | | -6,213 INCH LB. | | |
| EFFECT ON GUARANTEED P | EFFECT ON GUARANTEED PERFORMANCE: * | | | | |
| | None | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THE CHANGE IS DEPENDENT UPON | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | • | Bf Simons | | |
| | | | ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: | | | |
| | | NON-RECURRING: | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | | |
| DATE | | | "ONV&13.5.J. 6-1217& | | |

Delta Air Lines Inc. Change No. 242B

CONVAIR: SD

Mitle: Air Conditioning System, Revision to

Origin: Convair initiated

Reason for Change: 1. To prevent possible ingestion of exhaust gasses into system from other airplanes while on the ground

- 2. To prevent objectionable cycling between the turbo-compressors and the recirculating blower during ground operation.
- 3. Revision to CCP No. 242A.

Description of Change:

Page 122A, FIGURE 3.20-1 - AIR CONDITIONING PRESSURIZATION SYSTEM:

Above illustration will be revised to delete the fresh air check and control valves, items 10 and 35, in the ground air conditioning system.

Enclosure: (A) One copy Convair Sketch - AIR COND - TURBO COMPR. & RECIRC. FAN - MANUAL CONTROLS (For information only).

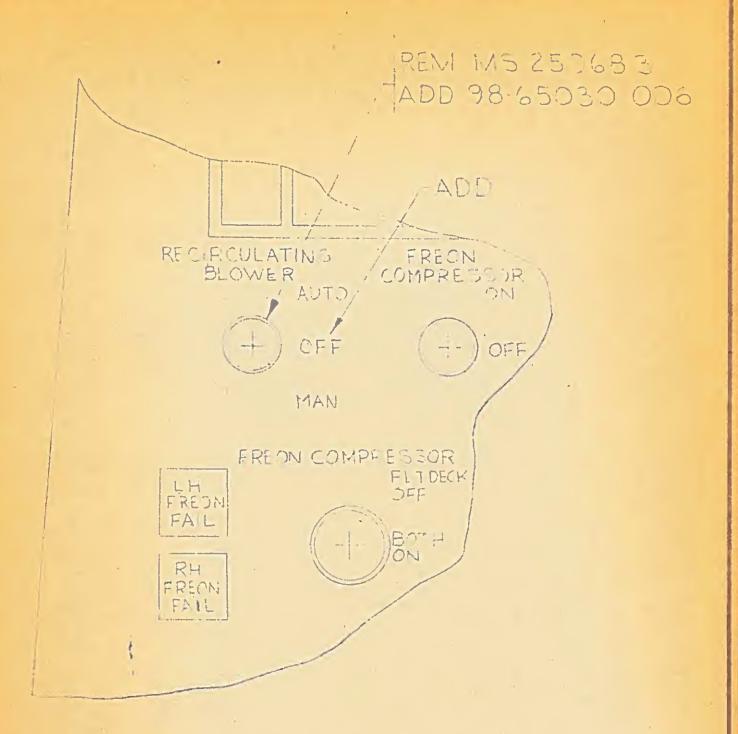
Effect on Weight Empty: -10.0 Pounds

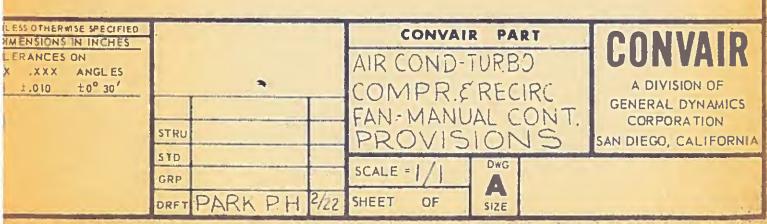
Effect on Balance: -6,213 Inch-Pounds

Effect on Performance: None

The following shall not appear in the specification language:

- 1. The recirculation valve item 9 will be modified to suit the subject revision; with part number change from 22-02451-1 to 22-02451-3.
- 2. The switches which control the turbo compressors and the recirculating blower are modified to permit manual control of these systems on the ground to prevent objectional cycling under certain ambient temperature conditions. Enclosure (A) shown the modified three-position switches and the revised labeling thereof.





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CONVAIR

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NU. ZD- 22-003 | | DATE: |
|--|---|---|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,405 DTD 3 June 1959 |
| CHANGE NO: 2420 | | MODEL: 22-3 (Convair "880") |
| TITLE Air Cond | itioning System, | Revision to |
| ORIGIN Convair | initiated | |
| REASON FOR CHANGE: | See second sheet | |
| EFFECT | ON WEIGHT * | EFFECT ON BALANCE * |
| GUAR, WT. EMPTY | OPER, WT, EMPTY | |
| 0 | 0 | O INCH LB. |
| EFFECT ON GUARANTEED P | None | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | ISAL TIPE |
| LATEST DATE OF ACCEPTAN | NCE: | AIRPLANES AFFECTED: |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: |
| ACCEPTED: | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| BY: | | |
| DATE: | | 109 V41 47.5. 64217A |

Delta Air Lines Inc. Change No. 2420

Title: Air Conditioning System, Revision to

Origin: Convair initiated

Reason for Change: 1. To prevent objectionable cycling between the turbo-compressors and the recirculating blower during ground operation.

2. Revision to CCP No. 242B.

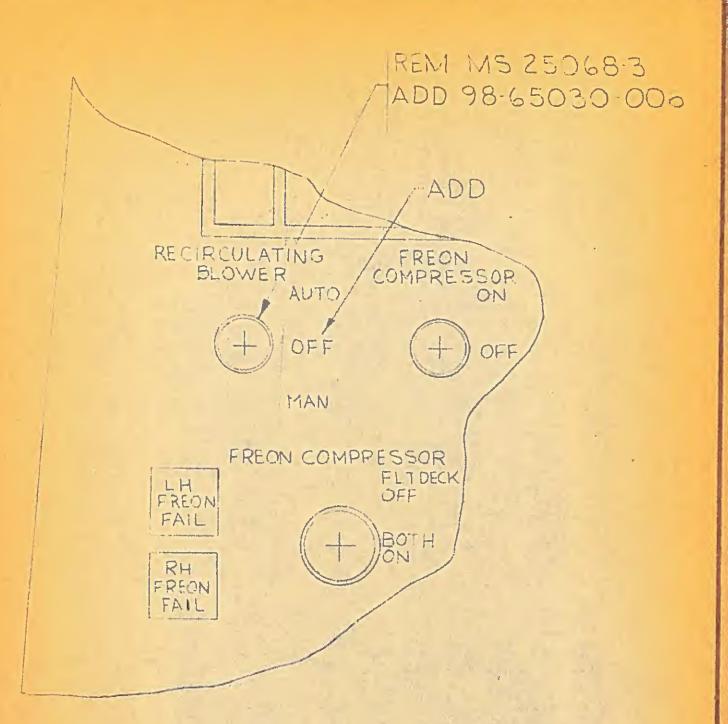
Description of Change:

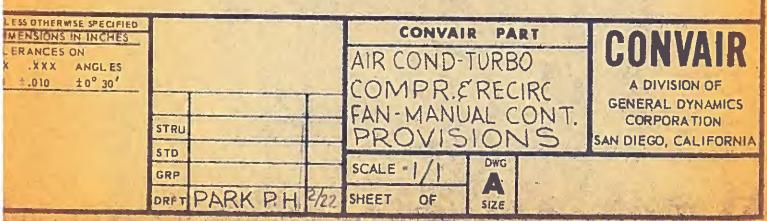
Enclosure: (A) One copy Convair Sketch - AIR COND - TURBO COMPR. & RECIRC. FAN - MANUAL CONTROLS (For information only)

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

The following shall not appear in the specification language:

The switches which control the turbo compressors and the recirculating blower are modified to permit manual control of these systems on the ground to prevent objectional cycling under certain ambient temperature conditions. Enclosure (A) shows the modified three-position switches and the revised labeling thereof.





A DIVISION OF GENERAL DYNAMICS CORPORATION SAN LIFEC, CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE | | |
|--|----------------------|-------|------------------|-----------------|------------------|
| CUSTOMER Delta Air | Lines Inc. | | MCL 10.400 | O DTD 12 | May 1959 |
| CHANGE NO 241 | | | MODEL 22- | -2 (Convair | "880") |
| TITLE Hydraulic | Pump Case Drain F | ilter | s, Installa | ation of | |
| ORIGIN TWA reques | sted and Convair p | ropos | ed for Del | ta. | |
| REASON FOR CHANGE: To | provide additiona | l fil | teration f | or hydraulic | system. |
| | N WEIGHT * | | E | FFECT ON BALAN | ICE * |
| | OPER. WT, EMPTY | | | | |
| /10.0 lb | ≠10.0 1b | | | <i>4</i> 8,280 | INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA | FUTURE CHANGE PROPOS | SAL | | | |
| PRIOR ACCEPTANCE OF T | | | | Blain | nono |
| | • | | | ENGINEERING | APPROVAL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTE | ED: | |
| SPECIAL PROVISIONS: | | | T ON PRICE PE | | |
| 5 | | NON-R | ECURRING: | | |
| ACCEPTED. | | CONVA | IR, A DIVISION O | F GENERAL DYNAM | IICS CORP. |
| BY | | | | | |
| PATE | | | | =8 | Object of But 14 |

Delta Air Lines Inc. Change No. 241

Title: Hydraulic Pump Case Drain Filters, Installation of

Origin: TWA requested and Convair proposed for Delta.

Reason for Change: To provide additional filteration for hydraulic

system.

Description of Change:

Page 64. Paragraph 3.15.1.10 FILTERATION:

Add the following sentence after the first sentence:

"In addition a filter, with appropriate relief valve setting, shall be installed in each of the four pump case drain lines."

Page 64A, FIGURE 3.15-1 HYDRAULIC SYSTEM:

Above illustration will be revised to show effects of this proposal.

Page A-10, APPENDIX I-C, HYDRAULIC EQUIPMENT:

Add the following item to the page:

"4 Pump Case Drain Filter, 10-mieron, 6 GPM (P/N to be supplied)

Effect on Weight Empty: /10.0 pounds

Effect on Balance: /8,280 inch-pounds

Effect on Performance: None

The following shall not appear in the Specification language:

"The filter will be of the disposable paper-element-type similar to AN-6234-3, except modified for use with Skydrol "500" oil. It will be located between the case drain line connection to the bypass restrictor check valve and the check valve in the case drain return line to the reservoir."

File

701 V AT 1 100 J. Det 217 A

CONVAIR

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

COMMERCIAL CHANGE PROPOSAL

| SPEC NO.: ZD+ 22-003 | | | DATE: |
|--|--|-----------------|--|
| CUSTOMER: Delta Airl | ines Inc. | | MCL 10,277 DTD |
| CHANGE NO: 240 | | | MODEL: 22-2 |
| TITLE Ramp and Ta | keoff Weight, Inc. | ease | of (Revise Ship Effectivity) |
| ORIGIN: DELTA TWX d | ated 29 September | 1958 | |
| REASON FOR CHANGE: C | ustomer request. | | * |
| EFFECT O | N WEIGHT * | | EFFECT ON BALANCE * |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | |
| ≠84.0 1b | ₹84.0 lb | | ₹70,331 INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * Nor | 19 | 1 |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF THE | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPOR | SAL N | |
| | | | ENGINEERING APPROVAL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: |
| RECU NON- | | RECUR NON-RE | CT ON PRICE PER AIRPLANE: RRING: ECURRING: |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| ВҮ, | | | |

DATE:

15.2/1- 11

Delta Airlines Inc. Change No. 240

Title: Ramp and Takeoff Weight, Increase of, (Revise Ship Effectivity)

Origin: DELTA TWX dated 29 September 1958

Reason for Change: Customer request.

Description of Change:

Page 12, Paragraph 3.1.2.2 LOADING SUMMARY:

Add weight figures after the following:

"Manufacturer's Weight Empty: Operating Weight Empty:"

Page 12 (Cont) SHIP EFFECTIVITY:

Delete the entire page.

Page 17, Paragraph 3.4.1 STRENGTH:

Revise the first four items in the Weight List to read as follows:

From: ***Maximum Taxi Weight (lb) 185,000

***Maximum Takeoff Weight (lb) 184,500

***Maximum Taxi Weight (lb) 180,000

***Maximum Takeoff Weight 178,500*

To: "Maximum Taxi Weight (1b) 185,000 Maximum Takeoff Weight (1b) 184,500"

Delete the following asterisk notes at the bottom of the page:

**Applicable to Airplanes 3 through 10.
*** Applicable to Airplanes 1 and 2.

Effect on Weight Empty: /84.0 pounds

Effect on Balance: \$70,331 inch-pounds

Effect on Performance: None

The state of the s

| PEC NO. 20 22-003 | | DATE |
|---|--|--|
| USTOMER Delta Airlines Inc. | | MCL 10,391 DTD 18 March 1959 |
| -ANGLIND 238A | | MODEL: (880) 22-2 |
| Increased | Zero Fuel Weight | |
| | | |
| DAL reques | t during 17 Decem | ber 1958 meeting. |
| | | |
| LASON FOR CHANGE: T | o increase allowadus payload. and | ble total of basic operating weight revision to CCP No. 238. |
| * | | |
| a superdiscussion are like some sorthy or acre subdiscussion of the | | |
| | ON WEIGHT | EFFECT ON BALANCE * |
| Jan. wT. EMPTY ≠100.0 1b | OPER, WT. EMPTY | |
| • | | \$85,600 INCH LB. |
| FECT ON GUARANTEED | PERFORMANCE. * None | |
| | ILL BE ACCUMULATED AN | |
| | A FUTURE CHANGE PROP | |
| | HANGE IS DEPENDENT UP THE FOLLOWING CHANGE | S. All A |
| | | THE SHOTP ENGINEERING APPROVAL |
| | | J. M. P. LHOINELKING AT HOTAL |
| ATEST DATE OF ACCEPT | ANCE: | AIRPLANES AFFECTED. |
| — millioner gase managements until — () () () | | |
| DECLIFE DICARSON | | FFFECT ON PRICE PER AIRPLANE: |
| | | RECURRING: |
| | | TOTAL |
| . G. F. C.E | and the spirit of the spirit o | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. |
| | e aman de la mandata describió de la completa de l | |
| Y | · nemakalang manamakalang arinyakalankalang manakalang manakalang manakalang manakalang manakalang manakalang | |
| | | |

Delta Airlines Inc. Change No. 238A

CONVAIR: SD

Title: Increased Zero Fuel Weight

Origin: DAL request during 17 December 1958 meeting.

Reason for Change: To increase allowable total of basic operating

weight plus payload, and revision to CCP No. 238.

Description of Change:

Page 17, Paragraph 3.4.1 STRENGTH:

Revise the third item in the weight list as follows:

Effect on Weight Empty: /100.0 pounds

Effect on Balance: \(\frac{485,600}{} \) inch-pounds

Effect on Performance: None



A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | DATE: | | |
|---|---|--|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10.340 DTD | | |
| CHANGE NO: 237 | MODEL: 22-2 (Convair "880") | | |
| TITLE: Specification Administrative C | Change (Delete position light flasher) | | |
| ORIGIN: Convair initiated | | | |
| REASON FOR CHANGE: To delete position as approved by CCP | | | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE * | | |
| GUAR, WT. EMPTY OPER, WT. EMPTY | | | |
| 0 0 | O INCH LB. | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | |
| | ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| 8Y: | | | |
| DATE: | TO 2 M & 174, 21, 41, 6-12 17 A | | |

tle: Specification Administrative Change (Delete position light flasher)

rigin: Convair initiated

eason for Change: To delete position light flasher from Appendix I-C as

approved by CCP No. 57

sscription of Change:

age A-3, APPENDIX I-C, ELECTRICAL EQUIPMENT:

Delete the following item from the Description List:

"1 Position Light Flasher"

Effect on Weight Empty: 0
Effect on Balance 0
Effect on Performance: None

4-42 .

a DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | | |
|---|--------------------|-----------------|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,339 DTD | | | |
| CHANGE NO: 236 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specification | n Administrative (| Change | e (Change AS 246C to AS 264D) | | | |
| ORIGIN: Convair initiated | | | | | | |
| REASON FOR CHANGE: | To update cockpi | t lig | nting specification. | | | |
| EFFECT | N WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROV | | | | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | | |
| REC | | RECUR NON-RI | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: CO | | | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | | |
| DATE: | | | TOWN AND SERVICE | | | |

Itle: Specification Administrative Change (Change AS 246C to AS 264D)

Origin: Convair initiated

Reason for Change: To update cockpit lighting specification

Description of Change:

Page 75, Paragraph 3.16.8.2.2 - INSTRUMENT PANELS:

Change the following in the first sentence:

From: "Aeronautical Standard 246C, revised 12-15-54"

To: "Aeronautical Standard 264D, revised 3-15-56"

Effect on Weight Empty: 0 Effect on Balance: 0

Effect on Performance: None

. . . .

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| · SPEC NO .: ZD- 22-003 | | | DATE: | | |
|--|------------------------------------|-----------------|---|---------------|----------------------|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,338 | DTD | | |
| CHANGE NO: 235 | | | MODEL: 22- | -2 (Convair | "880") |
| TITLE: Specification Light List) | n Administrative (| Change | (Revision | to Indicate | or |
| ORIGIN: Convair init | lated | | | | |
| REASON FOR CHANGE: | separate transfendicator lights, s | er pur | p and boost add yaw da | ter pump lo | v pressure lights |
| | N WEIGHT * | | EF | FECT ON BALAN | ICE * |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 | 0 | | | 0 | INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | * | | |
| NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOS | SAL N | , Y | ENGINEERING | APPROVAL |
| LATEST DATE OF ACCEPTA | NCE. | AIRPL | ANES AFFECTED |); | |
| REC NON | | RECUR NON-RE | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | |
| ACCEPTED: BY: DATE: | | CONVA | IR, A DIVISION OF | | |
| Walter Street Control of the Control | | | | -0. | VAI |

Title: Specification Administrative Change (Revision to Indicator

Light List)

Origin: Convair initiated

Reason for Change: To separate transfer pump and booster pump low

pressure indicator lights and to add yaw damper test

lights.

Description of Change:

Page 81, Paragraph 3.16.11.3.1 - INDICATOR LIGHT LIST:

Revise the first item under "FLIGHT ENGINEER'S STATION" as follows:

| From: "18 Pump Low Press. (Fuel Sys) | Electrical Dimming Red X |
|--|--------------------------|
| 10 - | Amber X Red X |
| Add the following under "PILOTS' INSTRUMENT PA | NEL" |
| | Electrical Dimming |
| 3 17 D D 1 | Red X Green X" |

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

The following shall not appear in the Specification language:
The effect of CCP No. 210A is included in this proposal.

when to

CONVAIR

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | • | | DATE: | | | |
|--|---|--------|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,395 DTD | | | |
| CHANGE NO: 234 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Two High Energy Ignition Systems, | | | Installation of | | | |
| | | | | | | |
| ORIGIN: Convair ini | tiated | | | | | |
| REASON FOR CHANGE: T | o provide two high f one high energy | n ener | rgy ignition systems in lieu em and one low energy system | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT, EMPTY | OPER. WT. EMPTY | | | | | |
| Neg. | Neg. | | Neg. INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | | | |
| | None | - | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A | | | | | | |
| ACCEPTANCE OF THIS CHA | ANGE IS DEPENDENT UPO | V | | | | |
| PRIOR ACCEPTANCE OF T | | | | | | |
| | | | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | EFFEC | CT ON PRICE PER AIRPLANE: | | | |
| | | RECUR | RRING:ECURRING: | | | |
| | | TOTAL | | | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BV. | | | | | | |
| BY: | | | | | | |
| DATE: | | | CONVAIR,5.D. 6-1217A | | | |

Title: Two High Energy Ignition Systems, Installation of

Origin: Convair initiated

Reason for Change: To provide two high energy ignition systems in lieu

of one high energy system and one low energy system

Description of Change:

Page 72, Paragraph 3.16.7.4 - SEPARATION OF UNITS:

Revise the first sentence to read as follows:

"Electrical units that are operately separately such as fuel pumps and inverters shall not have circuit protectors, switches or wiring common to more than one unit, excluding common portions of ignition systems."

Page 78, Paragraph 3.16.9 - IGNITION CONTROL SYSTEMS:

Revise the first sentence to read as follows:

"Two high-energy-type ignition systems shall be provided; each shall be separately controlled."

Page 78, Paragraph 3.16.9.1 - LOW ENERGY IGNITION SYSTEM:

Delete the entire paragraph, including paragraph number and title.

Effect on Weight Empty: Neg. Effect on Balance: Neg. Effect on Performance: None

The following shall not appear in the Specification language:

The language effect of CCP No. 158 is included in this proposal.

A DIVISION OF BENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE | | | |
|--|--|----------|---------------------------------|---------|-----------------------|-------------|
| CUSTOMFR: Delta Air | Lines Inc. | | MCL 10 | 336 | DTD | |
| CHANGE NO: 233A | | | MODEL. | 22-2 | (Convai | x "880") |
| TITLE Specification Dimming) | Administrative Ch | ange | (Passeng | ger Co | mpartme | nt Light |
| ORIGIN Convair initia | ated | | | | | |
| REASON FOR CHANGE: | To clarify the in 3.16.8.7; and rev | | | | | 3.3 and |
| | | | | | | |
| EFFECT | N WEIGHT . | | | EFFE | CT ON BAL | ANCE * |
| GUAR, WT, EMPTY O | OPER, WT. EMPTY O | | | | 0 | INCH LB. |
| EFFECT ON GUARANTEED P | | | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPOR | SAL N | J. H. | Chap | S NGINEERIN | NG APPROVAL |
| LATEST DATE OF ACCEPTA | NÇE: | AIRPLA | ANES AFFE | CTED: | | |
| SPECIAL PROVISIONS: | | RECUR: | T ON PRICE RING: CURRING: | | | |
| ACCEPTED: | | CONVA | IR, A DIVISIO | N OF GE | NERAL DYN | AMICS CORP. |
| BY: | | | | | | |
| DATE. | tiv | | | | | -1. |

Delta Air Lines Inc. Change No. 233A

COMVAIR: SD

Specification Administrative Change (Passenger Compartment Title:

Light Dimming)

Origin: Convair initiated

Reason for Change: To clarify the intent of Paragraphs 3.16.8.3.3 and 3.16.8.7; and revision to CCP No. 233

Description of Change:

Page 76, Paragraph 3.16.8.3.3 - LIGHTING CONTROLS:

Revise the third and fourth sentences as follows:

"The general lighting throughout the passenger compart-From: ment shall be controlled from the cabin attendant's panel and shall have two degrees of light intensity; dim and full brilliance. The switches shall be down for the dim position, off in the center position and up for full brilliance.

"The general lighting throughout the passenger compart-To: ment shall be controlled from the cabin attendant panel and shall have light intensity controlled from dim to full brilliance. The switches shall be of the momentary type; and shall be down for the dim position, neutral in the center position and up for full brilliance. An on/off switch shall also be provided".

Page 78, Paragraph 3.16.8.7 - SIDE WINDOW LIGHTING:

Revise the last sentence to read as follows:

"A switch shall be installed on the aft stewardess panel to separate this lighting from the overhead cove lights".

Effect on Weight Empty: 0 Effect on Balance: Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE: |
|---|---|---|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,335 DTD |
| CHANGE NO: 232 | | | MODEL: 22-2 (Convair "880") |
| TITLE: Specification to Fuselage | on Administrative , Change from Inte | Chang erchar | ge (Sealing Blades, Stabilizer ageable to Replaceable) |
| ORIGIN: Convair ini | tiated | | |
| REASON FOR CHANGE: 80 | ee statement at er | nd of | CCP |
| | N WEIGHT * | | EFFECT ON BALANCE * |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | |
| 0 | |) | O INCH LB. |
| EFFECT ON GUARANTEED P | | ne | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TI | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | SAL N | ENGINEERING APPROVAL |
| LATEST DATE OF ACCEPTAN | NCE: | AIRPL | ANES AFFECTED: |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. |
| BY: | | | |
| DATE: | | | 105 VAIN, 8. U. 8-1217 A |

Title: Specification Administrative Change (Sealing Blades, Stabilizer

to Fuselage, Change from Interchangeable to Replaceable)

Origin: Convair initiated

Reason for Change: See statement at end of CCP

Description of Change:

Page 125, Paragraph 3.23.1 - EQUIPMENT INTERCHANGEABILITY:

Delete the below item under "1. Interchangeable Parts":

"Sealing Blades, Stabilizer to Fuselage."

Page 126, Paragraph 3.23.1 - EQUIPMENT INTERCHANGEABILITY:

Add the below item under "5. Replaceable Parts"

"Sealing Blades, Stabilizer to Fuselage"

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

The following shall not appear in the Specification language:

To improve the quality of the sealing blade installation, it is proposed that the attachment holes be drilled during installation to eliminate any gaps which could be caused by an accumulation of fabrication tolerances. This potential condition cannot be corrected if interchangeability of this part is maintained. Accessibility to this area is adequate to perform the task.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-00 | 3 | | DATE: | |
|--|--|-----------------|---|---|
| CUSTOMER: Delta Ai | r Lines Inc. | | MCL 10,386 PTD 18 Febru | ery 19 |
| CHANGE NO: 231 | | | MODEL: 22-2 (Convair "880" |) |
| TITLE: Dual Nose | Gear Steering Cont | rol, | Installation of | |
| ORIGIN: Delta ver | bal request on 18 F | ebrua | ary 1959 | |
| REASON FOR CHANGE: (| Customer request. | | | |
| EFFEC | T ON WEIGHT * | | EFFECT ON BALANCE * | |
| GUAR. WT. EMPTY | OPER. WT. EMPTY | | | O. C. |
| 49.0 1b | ≠9.0 1b | | | H LB. |
| EFFECT ON GUARANTEED | PERFORMANCE: * | | | |
| TOTALS REFLECTED IN ACCEPTANCE OF THIS C | A FUTURE CHANGE PROPOSE CHANGE IS DEPENDENT UPO THE FOLLOWING CHANGES: | SAL N | | |
| | | | ENGINEERING APPROV | /AL |
| LATEST DATE OF ACCEPT | TANCE: | AIRPL | LANES AFFECTED: | |
| SPECIAL PROVISIONS: | | RECUR NON-RI | CT ON PRICE PER AIRPLANE: RRING: RECURRING: L: | |
| ACCEPTED: | and the state of t | CONVA | AIR, A DIVISION OF GENERAL DYNAMICS CORE | ·. |
| BY: | | | | |
| DATE: | | | 27N1V4101 | 6.000 |

Delta Air Lines Inc. Change No. 231

CONVAIR: SD

Dual Nose Gear Steering Control. Installation of Title:

Origin: Delta verbal request on 18 February 1959

Reason for Change: Customer request.

Description of Change:

Page 38, Paragraph 3.8.4.7 STEERING CONTROL:

Revise the sentence starting in first line at top of the page and the next sentence thereafter as follows:

"A steering wheel located in the pilot's compartment shall be provided and arranged so that the directional sense of control is evident. The steering wheel shall be marked to indicate the neutral position of the nose wheel."

"Two steering wheels, one for the pilot and one for the copilot, located in the pilots' compartment shall be pro-To: vided and arranged so that the directional sense of control is evident. The steering wheels shall be marked to indicate the neutral position of the nose wheel."

Figure 3.14-2 PILOT AND COPILOT CONSOLE:

Revise above illustration by relocating copilot's audio selector panel, copilot's interior lights panel and mike selector panel aft on the console. Show copilot's nose steering wheel, similar to pilot's wheel.

Effect on Weight Empty: Effect on Balance: 49.0 pounds
42,015 inch-pounds

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 2D-22-003 | | DATE: | | | | |
|---|--|---|-----------------------------|--|--|--|
| CUSTOMER: Delta Airlines Inc. | | | MCL 10,327 DTD | | | |
| CHANGE NO: 230 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Specification Administrative Change (Stainless steel tubing to wing center section, with exceptions) | | | | | | |
| ORIGIN: Convair initiated | | | | | | |
| REASON FOR CHANGE: To | clarify the inter | nt of | Par. 3.12.9.6 | | | |
| | | | | | | |
| EFFECT ON WEIGHT * | | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF THE | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPOR | SAL N | | | | |
| | * | | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | | | | |
| DATEL | | | Edit Jan | | | |

Title: Specification Administrative Change (Stainless steel tubing to

wing center section, with exceptions)

Origin: Convair initiated

Reason for Change: To clarify the intent of Par. 3.12.9.6

Description of Change:

Page 51, Paragraph 3.12.9.6 - PIPING AND FITTINGS:

Revise the first sentence as follows:

From: "Fuel lines external to the fuel tanks shall be stainless steel tubing except that lines in the nacelle may be fire-proof, fatigue and abrasion resistant flexible hose."

To: "Fuel lines external to the fuel tanks and sealed structure wing center section shall be stainless steel tubing except that lines in the nacelle may be fire-proof, fatigue and abrasion resistant flexible hose."

Effect on Weight Empty: O
Effect on Balance: O
Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE: | | | |
|---|--------------------|---|-------------------------------|------|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,392 DTD 23 March 1959 | | | |
| CHANGE NO: 229 | | | MODEL: 22-2 (Convair "880") | | | |
| TITLE: Angle of Att | ack Presentation, | Dele | tion of on Airspeed Indicator | 3 | | |
| ORIGIN: Delta Letter T.B. EASTLAN | | ed 19 | March 1959 (J. F. NYCUM to | | | |
| REASON FOR CHANGE: Ct | stomer request | | | | | |
| EFFECT | N WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR. WT. EMPTY | OPER, WT, EMPTY | | | | | |
| -3.0 | -3.0 | | -1,269 INCH I | _В. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL | | | | L | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | • | | | |
| DATE. | | | | 1010 | | |

Title: Angle of Attack Presentation, Deletion of on Airspeed Indicator

Origin: Delta Letter File No. 142, dated 19 March 1959 (J. F. NYCUM to

T. B. EASTLAND JR.)

Reason for Change: Customer request

Description of Change:

Page 58, Paragraph 3.14.1.1 - PILOT'S INSTRUMENT PANEL:

Revise the first item in the instrument list as follows:

From: "*One indicator, airspeed angle of attack"

To: "*One indicator, airspeed"

Page 58, Paragraph 3.14.1.2 - COPILOT'S INSTRUMENT PANEL:

Revise the second item in the instrument list as follows:

From: "*One indicator, airspeed angle of attack"

To: "#One indicator, airspeed"

Page A-9. APPENDIX I-C. INSTRUMENTS AND RELATED EQUIPMENT:

Revise the second item under "Kollsman Integrated Instrument System"

From: "2 Indicator, Airspeed Angle Kollsman A29297-10

of Attack plus range

To: "2 Indicators, Airspeed Kollsman (P/N to be supplied)

Delete the below item under "Kollsman Integrated Instrument System"

"1 Transmitter, Angle of Attack Kollsman 68-40800-0401"

Effect on Weight Empty: -3.0 lbs.

Effect on Balance: -1,269 in/lbs

Effect on Performance: None

, CONVAIR

A DIVISION OF GENERAL DYNAMICS COMPONATION SAN DIVIGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | |
|--|--------|---|---------------|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,393 | | rised eptember 19 | |
| CHANGE NO: 228A | | MODEL: 22-2 | (Convair | 1880") | |
| TITLE. Passenger and Stewarders S | Beat B | olts, Revisio | on to | | |
| ORIGIN: Delta request (May to Harr Delta TWX dated 9 September | | | May 1959, | and | |
| REASON FOR CHANGE: Customer request, an | id rev | ision to CCP | No. 228 | | |
| EFFECT ON WEIGHT * | | EFFE | CT ON BALANC | Œ | |
| OPER. WT. EMPTY O O | | 0 | | INCH LB. | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | SAL | | 3/ Sim | APPROVAL. | |
| LATEST DATE OF ACCEPTANCE: | AIRPL | ANES AFFECTED: | | and the same of th | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTÈD: | CONVA | IR, A DIVISION OF GE | ENERAL DYNAMI | CS CORP. | |
| ΒY: | | | | | |
| DATE | | | 70 | MAIN, | |

Delta Air Lines Inc. Change No. 228A

Title: Passenger and Stewardess Seat Helts, Revision to

Origin: Delta verbal request (May to Harris and Parsons)
5 May 1959, and Delta TWX dated 9 September 1959.

Reason for Change: Customer request, and revision to CCP No. 228

Description of Change:

Page A-12, APPENDIX I-C, FURNISHINGS:

Revise the below items in the Description List as follows:

From: "3 Stewardess Safety Belts and Shoulder Harness

84 Passenger Safety Belts"

To: "3 Stewardess Seat Belts Convair (with Cumming - Saunders Dwg. SK-22-91559 3100A gold anodized buckle) and shoulder harmesses.

64 Passenger Seat Belts Convair (with Cumming - Saunders Dwg. SK-22-91559" 3100A gold anodized buckle)

Enclosure: (A) One copy Conveir Dwg. SK-22-91559 - SEAT SAFETY BELTS - DELTA (For information only)

Effect on Weight Empty: 0 Effect on Bulance: 0 Effect on Performance: None

The following shall not appear in the specification language:

Vendor and part number for passenger and stewardess seat belts will be furnished when available.

SAN LILED, CALIFORNIA

| SPEC NO. ZD- 22-003 | | | DATE: | | | | |
|---------------------------------|--|---|---|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,333 DTD | | | | |
| CHANGE NO: 227 | | | MODEL: 22-2 (Convair "880") | | | | |
| TITLE: Specificat Specificat | ion Administrative ion Language Revis | Chan | ge (Miscellaneous | | | | |
| ORIGIN Convair in | itiated | | | | | | |
| REASON FOR CHANGE: | To clarify the int | ent of | the Specification. | | | | |
| | ON WEIGHT * | | EFFECT ON BALANCE | | | | |
| GJAR, WT. EMPTY O | OPER. WT. EMPTY | | O INCH LB. | | | | |
| EFFECT ON GUARANTEED | PERFORMANCE: * None | | | | | | |
| ACCEPTANCE OF THIS CH | LL BE ACCUMULATED AND FUTURE CHANGE PROPOSED FOR THE FOLLOWING CHANGES | SAL | ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| CCEPTED: | | | R, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| Y: | | | | | | | |
| PATE: | The deformation restringing | | 271 - 0 (-), Set (-) 4 x | | | | |

Title: Specification Administrative Change (Miscellaneous Specification

Origin: Convair initiated

Reason for Change: To clarify the intent of the Specification

Description of Change:

Page 23, Paragraph 3.6.3 - ELEVATORS:

In the first line of the last sentence, delete the work "trin".

Page 58, Paragraph 3.14.1.1 - PILOT'S INSTRUMENT PANEL:

Delete the following 14th and 17th items from the instrument list:

"One airspeed system electrical failure warning light One power failure indicator (essential bus)"

Add the following item to the instrument list:

"One master caution light"

Page 104, Paragraph 3.19.1.1.3 - OBSERVER'S SEAT:

Revise the following paragraph:

"A folding auxiliar; seat with upholstered seat, backrest From: and arms, shall be provided aft of the pilot for use of an observer".

"An upholstered auxiliary seat with backrest and arms shall To: be installed aft of the pilot for use of an observer".

Page 104, Paragraph 3.19.1.1.6 - PASSENGER SEATS:

Revise the first sentence to read as follows:

"The passenger seat arrangement shall be as shown on Figures 1-2 and 1-3".

Change the following in the fifth sentence:

"(except for club area and forward main cabin seats)" From:

"(except for club area seats)" To:

Page 110, Paragraph 3.19.3.1.1 - PASSENGER COMPARTMENT:

In the fourth line, change "28 inches" to "24 inches"

Effect on Weight Empty: O

Effect on Balance: Effect on Performance: None

75 (A)

| PEC NU. 20- 22-003 | | L | AIE | | | |
|--|---------------------------------|--|--|---------------|--|--|
| STOME Delta Air Lines Inc. | | MCL 10,332 DTD | | | | |
| HARDETON 2264 | | ٨ | MODEL: 22-2 | (Convair " | 880") | |
| Specification stal Switchi | n Administrative C | nange | (Revision to | o Pilots' P | ede- | |
| Convair ini | itiated. | agenta assess on quantities such | g dig digenetalgi into apply and <u>summing</u> plane private the sea go by distinct digit | | | |
| TRANSFER LATINE TO | supplement and ro | vise | CCP No. 226 | | | |
| | | | | | aganta | |
| FFECT (| IN WEIGHT | | EFFE(| TON BALANCE | | |
| O O | | | O INCH LB. | | | |
| FFERCT ON SPARANTEED F | PERFORMANCE None | 2 | mag kardinari, mala yangan mangapan manan barasa 19 (18) . S.C. | | a spiral and a sharp of the same of the sa | |
| THE STATE OF THIS CH | ANGE IS DEPENDENT 120 | 4 | B | / Simo | ne e | |
| This CCP supplements but does not supersede CCP No. 226. | | | ENGINEERING APPROVA! | | | |
| A PEST DATE OF ACCEPTA | ANCE. | AIRPL | ANES AFFECTED. | | | |
| SPICE WITH A STATE OF THE STATE | | EFFECT ON PRICE PER AIRPLANE RECURRING- NON-RECURRING. TOTAL | | | | |
| | | CONV | AIR, A DIVISION OF 3 | ENERAL DYNAMI | US CORP. | |
| hy | | | | | | |
| | pungin duga pip 11 dihumilingip | | | | | |

Delta Air Lines Inc. Change No. 22 A

Page 1 of 2

Title: Specification Administrative change (Revision to Pilots'

Pedestal Switching)

Origin: Convair initiated.

Reason for Change: To supplement and revise CCP No. 226.

Description of Change:

Page 40, Paragraph 3.10.1.5.1 - STABILIZER TRIM CONTROL:

Delete the last two sentences from the paragraph, which read as Tollows:

"An override switch shall be provided on the pedestal, adjacent to the stabilizer hydraulic cutoff, capable of disconnecting all power to the electric stabilizer trim system. This switch shall be guarded in the "on" position".

Page 62F, PILOT'S AND COPILOT'S PEDESTAL

Revise above illustration to show "inboard spoiler control switch", as shown on Enclosure (A).

Page 80, Add the following new paragraph to the page, after Paragraph 3.15.11.1.1:

"3.16.11.1.2 SPEED BRAKE SPOILER WARNING HORN: An intermittent warning horn shall be provided to operate under the following conditions:

Condition One, inboard spoiler switch in the normal position:

With the speed brake spoilers extended five degrees or more, advancing any throttle lever beyond approximately the 90 percent RPM position shall cause the warning horn to sound intentittently.

Condition Two, inboard spoller switch in the retract position:

With the airplane airborne, the speed brake spoiler handle may be advanced to any position, irrespective of throttle lever position, and the warning horn will not sound. With the airplane on the ground and the speed brake spoiler is extended five degrees or more, advancing any throttle lever be ond approximately the 90 percent position shall cause the warning horn to sound intermittently".

COLVAIN: SD

Delta Air Lines Inc. Change No. 226A

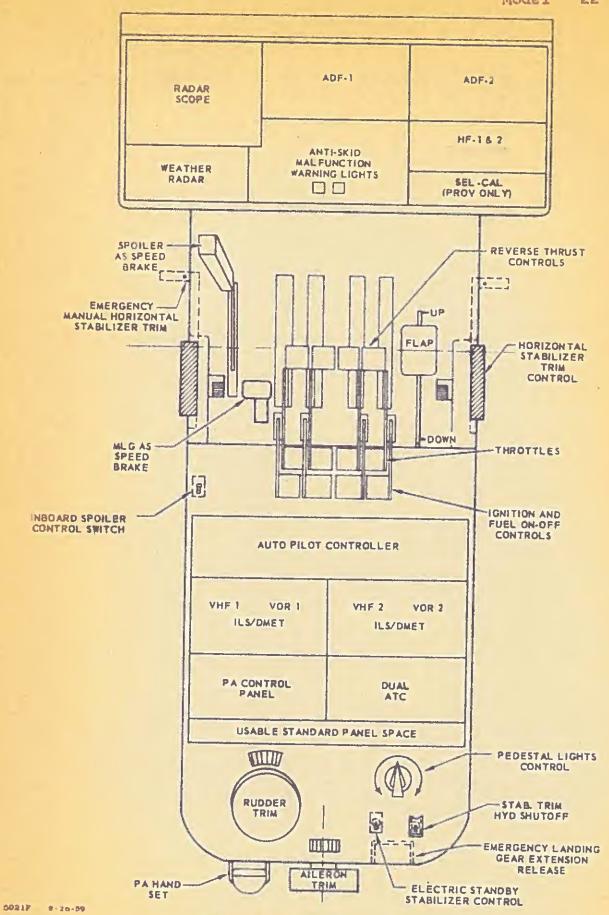
Page 2 of 2

- Enclosures: (A) One copy of Figure 3.14-6, PILOT'S AND COPILOT'S PEDESTAL (Revised)
 - (B) One copy of Convair Sketch showing labeling of Inboard Spoiler Switch (For information only.)

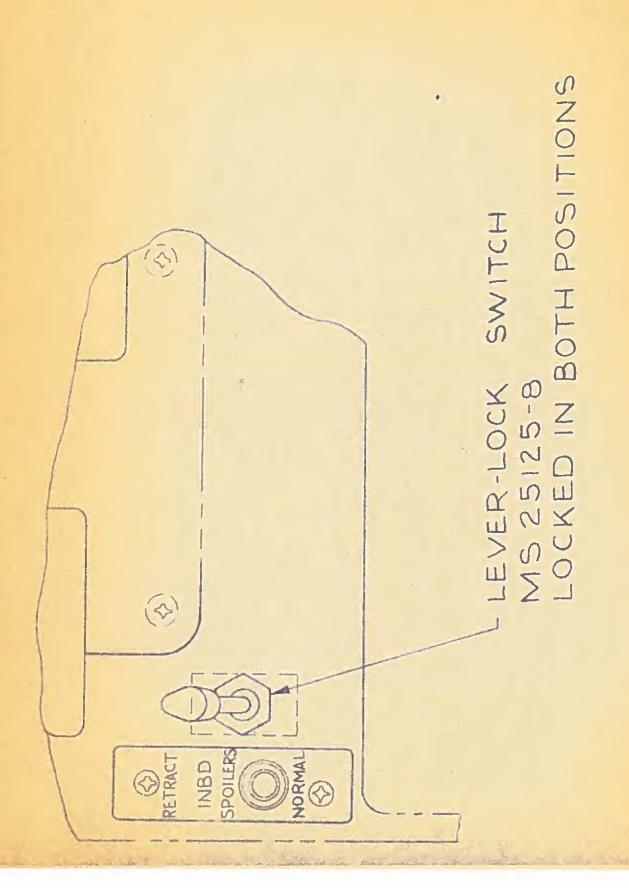
Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

The following shall not appear in the Specification language:

The effect of CCP No. 140A (Stabilizer Trim Control, Electric Drive Capability) approved by Customer, is included in this proposal as concerns Para. 3.10.1.5.1.



PILOT'S AND CO-PILOT'S PEDESTAL



Title: Specification Administrative Change (provide assist ropes

in flight compartment)

Origin: Convair initiated

Reason for Change: To clarify the Intent of the Specification

Description of Change:

Page 114, Paragraph 3.19.6.3 EVACUATION PROVISIONS:

Revise the first sentence as follows:

"Suitable means shall be provided for assisting rapid evacuation Prom: from energency exits, including assist ropes at exits over the wing, and at the forward main entrance door, and noninflatable escape chutes at each ralley service door".

"Suitable means shall be provided for assisting rapid evacuation Tor from emergency exits, including assist ropes at exits over the wing and over left and right hand windows in flight compartment. In addition, crew assist ropes shall be provided at the forward main entrance door, and noninflatable escape chutes at each galley service loor".

Effect on Weight Empty: 0 Effect on Balance: Effect on Performance: Hone

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE: | | |
|--|--------------------|------------------|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,316 DTD | | | |
| CHANGE NO: 205 | | | MODEL: (880) 22-2 | | |
| Specification Administrative Change (Delete reference to aileron from Par. 3.5.2.6) | | | | | |
| ORIGIN: Convair initiated. | | | | | |
| REASON FOR CHANGE: 1 | o make Specificat | ion co | ompatible with the airplane. | | |
| | N WEIGHT * | | EFFECT ON BALANCE * | | |
| GUAR. WT. EMPTY O | OPER, WT. EMPTY | | O INCH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | 9 | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: AIRPL | | AIRPLA | ANES AFFECTED: | | |
| | | RECURI NON-RE | TON PRICE PER AIRPLANE: RRING: ECURRING: | | |
| ACCEPTED: CONV | | CONVAI | NR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | | |
| DATE: | | | CONVALA,5,5,642174 | | |

Delta Air Lines Inc. Change No. 205

Specification Administrative Change (Delete reference to Title:

aileron from Par. 3.5.2.6)

Origin: Convair initiated.

Reason for Change: To make Specification compatible with the airplane.

Description of Change:

Page 21, Paragraph 3.5.2.6 WING TIPS:

Revise the last sentence in paragraph as follows:

"The wing tip shall have a removable cap and shall extend aft to provide protection for the outer extremity of the

aileron."

"The wing tip shall have a removable cap." To:

Effect on Weight Empty: 0 Effect on Balance: Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DILIGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | |
|--|--------------------|----------------|--|-------------------------|
| CUSTOMER Delta Air Lines Inc. | | MCL 10,361 | OTD 18 November 195 | |
| CHANGE NO: 203 | | | MODEL: (880) 2 | 2-2 |
| TITLE: Spare Wiring | -Conduit, Installs | ation | of | |
| ORIGIN: TWA requested | d and Convair prop | posed | for Delta | |
| REASON FOR CHANGE: | s above | | | |
| EFFECT | N WEIGHT . | | EFFECT | ON BALANCE * |
| GUAR, WT. EMPTY | OPER, WT, EMPTY | | | |
| +5.0 1b | +5:0 lb | | +3,900 | INCH LB. |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | | | |
| | None | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | ENG | INEERING APPROVAL |
| LATEST DATE OF ACCEPTANCE: | | AIRPL | ANES AFFECTED: | |
| | | RECUR NON-R | T ON PRICE PER AIRP RRING: ECURRING: | |
| ACCÉPTED: CONV | | CONVA | AR, A DIVISION OF GENE | RAL DYNAMICS CORP. |
| BY: | | | | |
| DATE: | | | | THY (S(A)) (L.L. SEE) A |

Delta Air Lines Inc. Change No. 203

Title: Spare Wiring-Conduit, Installation of

Origin: TWA requested and Convair proposed for Delta

Reason for Change: As above

Description of Change:

Page 69, Paragraph 3.16.5.6.1 - Conduit Location:

Add the following to the end of the paragraph:

"Two sections of one inch rigid conduit, each approximately 12 feet long, shall be installed below the cabin floor (and attached by clips to floor beams) between the front spar and the aft main wheel well to permit future routing of new wiring without removing cabin seats and floor panels".

Effect on Weight Empty: +5.0 lbs

Effect on Balance: +3,900 inch-lbs

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE: | |
|--|--|-----------------|---|---------------------|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,357 | DTD 20 October 19 | |
| CHANGE NO: 202 | | | MODEL: (880 |) 22-2 |
| TITLE: No. 2 Lead | ling Edge Slat, In | stalla | | |
| ORIGIN: TWA/Delta/ December 1 | Convair Conferenc | es of | l and 2 April | 1958 and 17 |
| REASON FOR CHANGE: | To reduce take-of | f dist | Cances. | |
| | | | Can | celled |
| | ON WEIGHT * | | EFFEC | T ON BALANCE * |
| GUAN, WT. EMPTY | OPER. WT. EMPTY | | | • |
| ≠531.0 lb | 4531.0 lb | | | 44-6,127 INCH LB. |
| EFFECT ON GUARANTEED F | | oted. | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CH PRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPO ANGE IS DEPENDENT UPO | SAL N | | |
| | | | EN | GINEERING APPROVAL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | |
| SPECIAL PROVISIONS: | | RECUR NON-RE | T ON PRICE PER AIR RING: CURRING: | |
| ACCEPTED: | | CONVA | R, A DIVISION OF GENE | ERAL DYNAMICS CORP. |
| ВҮ: | | | | - |
| DATE: | | | | 701 VALUE 0 14147A |

Page 1 of 4

Title: No. 2 Leading Edge Slat, Installation of

Origin: TWA/Delta/ Convair Conferences of 1 and 2 April 1958 and 17

December 1958

Reason for Change: To reduce take-off distances.

Description of Change:

Page 10, Paragraph 3.1.1.1 GUARANTEED PERFORMANCE:

Change the first four items on page as follows:

| From: | "Take-off distance at sea level over 50-ft obstacle in accordance with CAR 4b (1.2 Vs ₁ used for take-off speed) with a weight of 140,000 lb | Ft | ±5% | 4,630 |
|-------|--|----|------|--------|
| | Take-off distance at sea level over 50-ft obstacle in accordance with CAR 4b (1.2 V _{S1} used for take-off speed) with a weight of 173,500 lb at lift off in standard air | Ft | ±800 | 7,610 |
| | Take-off distance at sea level on 90° day over 31-ft obstacle in accordance with CAR 4b (1.2 V _{S1} used for take-off speed) with weight of 173,500 lb at lift off | Ft | ±850 | 8,350 |
| | Take-off distance at sea level over 31-ft obstacle in accordance with CAR 4b (1.2 Vs_1 used for take-off speed) on a 90-degree F day with weight of 160,000 lb | Ft | ±5% | 6,820" |
| To: | "Take-off distance at sea level in accordance with SR-422A regulations for a segmental flight path with weight of 140,000 lb at lift off on standard day | Ft | ±5% | 4,980 |
| | Take-off distance at sea level in accordance with SR-422A regulations for a segmental flight path with a weight of 173,500 lb at lift off on standard day | Ft | ±705 | 6,720 |

Delta Air Lines Inc. Change No. 202

Page 2 of 4

Ft ±5%

6,600"

| Take-off distance at sea level on 90-degree F day in accordance with SR-422A regulations for a segmental flight path with weight of 173,500 lb at lift off | Ft | ±760 | 7,480 |
|--|----|------|-------|
| Take-off distance at sea level in | | | |
| accordance with SR-422A regulations for a segmental flight path | | | |
| on a 90-degree F day with a weight | | | |

Page 11, GUARANTEED PERFORMANCE:

Under "STALL SPEED", change paragraph b. as follows:

of 160,000 lb at lift off

From: "98 knots ±8 knots at 123,500 lb with landing flap setting used for landing distance guarantee"

"97 knots ±8 knots at 123,500 lb with landing flap setting used for landing distance guarantee"

Page 13, Paragraph 3.1.3.1 WING:

Add the following new item to the end of the paragraph:
"Leading Edge Slats "Extensible"

Page 17, Paragraph 3.4.1 STRENGTH:

Change the third item in design condition list as follows:

From: "Maximum zero fuel weight (lb) 113,000"

To: "Maximum zero fuel weight (lb) 113,531"

Page 17, Paragraph 3.4.2 DESIGN SPEEDS:

Add the following item after the fifth item which is "Design speed (flaps 1/2 down) 245K or M = 0.60":

"Design speed (leading edge slat extension) 245K or M = 0.60"

Page 3 of 4

Page 22, Add the following new paragraph to the page, after paragraph 3.5.4.2:

"3.5.4.2.1 LEADING EDGE SLATS: Extensible leading edge slats shall be provided."

Page 41, Paragraph 3.10.2.1 LIFT AND DRAG INCREASING DEVICE SYSTEMS:

Revise the paragraph to read as follows:

"The trailing edge flaps shall be operated by hydraulic power and the leading edge slats shall be operated by electrical power. Both systems shall be controlled by a single lever on the pilot's pedestall. The trailing edge flaps shall be operated by a hydraulic motor-driven gear box located in the fuselage and powered by both hydraulic systems. The leading edge slats shall be operated by and electrical motor-driven gear box mounted in the leading edge section between screw jacks. In each system, torque tubes shall connect the gear box to mechanical actuators located adjacent to each flap section and slat section. Each system shall be irreversible to prevent flap motion from airload. Full trailing edge flap deflection shall be obtainable from either hydraulic system. An individual gear box, each powered by two electric motors, shall be provided for each leading edge slat. A monitoring system shall be provided to prevent asymmetrical flap positioning of either the trailing edge flaps or leading edge slats in the event of mechanical failure. Means shall be provided to warn the pilot that the flaps are extended and the airplane is operating at a speed in excess of the placard speed for that particular flap setting. Separate indicator lights for the left and right hand leading edge slats shall be provided which will illuminate when the slats have fully extended and will remain illuminated until the slats have fully retarded."

Page 59, Paragraph 3.14.1.3 ENGINE INSTRUMENT PANEL:

Add the following item to the instrument panel list:

"Two leading edge slat indicator lights"

Page 126, Paragraph 3.23.1 EQUIPMENT INTERCHANGEABILITY:

Add the following under paragraph "4. Inherently Interchangeable Parts"
"Leading Edge Slats"

Delta Air Lines Inc. Change No. 202

Page 4 of 4

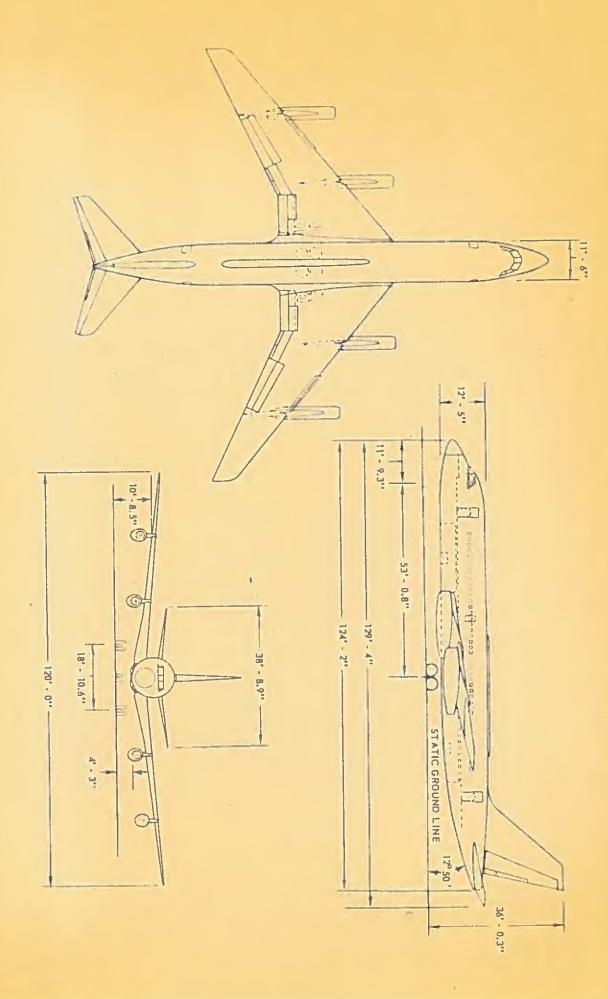
Page A-3, APPENDIX I-C, ELECTRICAL EQUIPMENT:

Add the following item to the Description List:

"2 Gear Boxes, Leading Edge Slat Actuating (with two electric motors each)"

- enclosures: (A) One copy of Figure 1-1, GENERAL ARRANGEMENT (for information only, figure in Specification will be revised to show leading edge slats on acceptance of this change)
 - (B) One copy of Conveir Drawing SD-58-03147 WING L. E. SLAT (for information only)

Effect on Weight Empty: #531.0 pounds
Effect on Balance: #16,127 inch-pounds
Effect on Performance: As noted



GENERAL ARRANGEMENT

A BIT SION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| CHANGE NO: 201 CHANGE NO: 201 MODEL: (880) 22-2 TITLE: Micro Switch, Lavatory, Deletion of ORIGIN. Delta requested by Letter, File 142, dated 31 October 1958 REASON FOR CHANGE: Customer request. EFFECT ON WEIGHT: EFFECT ON BALANCE: GUAR, WT. EMPTY OPER, WT. EMPTY Negligible Negligible Negligible Negligible INCH LB. EFFECT ON GUARANTEED PERFORMANCE: None * NeCLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: | SPEC NO.: ZD- 22-003 | D/ | ATE: | | |
|--|-------------------------------------|----------------------|--------------------------------------|--|--|
| ORIGIN. Delta requested by Letter, File 142, dated 31 October 1958 REASON FOR CHANGE: Customer request. EFFECT ON WEIGHT' EFFECT ON BALANCE: Wegligible Negligible Negligible INCH LB. EFFECT ON GUARANTEED PERFORMANCE: None **None** **None** | CUSTOMER: Delta Air Lines Inc. | | | | |
| ORIGIN. Delta requested by Letter, File 142, dated 31 October 1958 REFASON FOR CHANGE: Customer request. EFFECT ON WEIGHT | CHANGE NO: 201 | | ODEL: (880) 22-2 | | |
| EFFECT ON WEIGHT * EFFECT ON BALANCE * GUAR, WT. EMPTY OPER, WT. EMPTY Negligible Negligible Negligible INCH LB. EFFECT ON GUARANTEED PERFORMANCE * NONe * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: ACCEPTED CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | TITLE: Micro Switch, Lavatory, I | eletion of | | | |
| EFFECT ON WEIGHT * EFFECT ON BALANCE * GUAR, WT. EMPTY OPER, WT. EMPTY Negligible Negligible Negligible INCH LB. EFFECT ON GUARANTEED PERFORMANCE * NONe * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: ACCEPTED CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| EFFECT ON WEIGHT * EFFECT ON BALANCE * GUAR, WT. EMPTY OPER, WT. EMPTY Negligible Negligible Negligible INCH LB. EFFECT ON GUARANTEED PERFORMANCE * NONe * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: ACCEPTED CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | ORIGIN. Delta requested by Letter | . File 142 | dated 31 October 1958 | | |
| EFFECT ON WEIGHT * EFFECT ON BALANCE * GUAR, WT. EMPTY OPER, WT. EMPTY Negligible Negligible Negligible INCH LB. EFFECT ON GUARANTEED PERFORMANCE: * None **NONE **ENGINEERING APPROVAL **LATEST DATE OF ACCEPTANCE:* **ACCEPTANCE OF THE FOLLOWING CHANGES:* **EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: **TOTAL:* **CCEPTED** **CONYAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| Negligible | REASON FOR CHANGE: Customer reques | st. | Rejecter | | |
| Negligible | EFFECT ON WEIGHT * | | EFFECT ON BALANCE * | | |
| None NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: ACCEPTED: CONYAIR, A DIVISION OF GENERAL DYNAMICS CORP. | OPER. WT. EMPTY | | | | |
| Negligible changes will be accumulated and fotals reflected in a future change proposal acceptance of this change is dependent upon prior acceptance of the following changes: Engineering approval Latest date of acceptance: Already provisions: Effect on price per airplane: Recurring: Non-recurring: Total: CONYAIR, a division of general dynamics corp. | Negligible Negligibl | .e | Negligible INCH LB. | | |
| TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | EFFECT ON GUARANTEED PERFORMANCE: * | None | | | |
| PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: ENGINEERING APPROVAL LATEST DATE OF ACCEPTANCE: AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| AIRPLANES AFFECTED: SPECIAL PROVISIONS: EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| RECURRING: NON-RECURRING: TOTAL: CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | LATEST DATE OF ACCEPTANCE: | | | | |
| NON-RECURRING: TOTAL: CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: | | |
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| At 1 c | | | | | |
| DATE- | | | | | |

Delta Air Lines Inc. Change No. 201

Title: Micro Switch, Lavatory, Deletion of

Origin: Delta requested by Letter, File 142, dated 31 October 1958

Meason for Change: Customer request.

Description of Change:

Page 107, Paragraph 3.19.2.2 LAVATORIES:

Change the last sentence as follows:

From: "The lavatory lights shall dim when the door is open."

"The aft lavatory lights shall dim when the door is opened." To:

Effect on Weight Empty: Negligible Effect on Balance: Negligible

Effect on Performance: None

The following shall not appear in the Specification language:

This proposal covers the removal of the micro switch in the forward lavatory only.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | DATE: | | | | | |
|--|---|--|--|--|--|--|
| CUSTOMER: Delta Airlines Inc. | MCL 10,331 DTD | | | | | |
| CHANGE NO: 225 | MODEL: (880) 22-2 | | | | | |
| Specification Administrative Change (Relocation of the Emergency Air Brake Control Handle | | | | | | |
| ORIGIN: Convair Initiated REASON FOR CHANGE: To improve flexibil | | | | | | |
| emergency braking | lity of the nose wheel steering and | | | | | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE* | | | | | |
| O O O | o INCH LB. | | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * | | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | SAL | | | | | |
| | ENGINEERING APPROVAL | | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| ВУ | - | | | | | |
| DATE: | Section and Administration | | | | | |

Delta Airlines Inc. Change No. 225

CONVAIR: SD

Title: Specification Administrative Change (Relocation of the Emergency

Air Brake Control Handle

Origin: Convair Initiated

Reason for Change: To improve flexibility of the nose wheel steering

and emergency braking

Description of Change:

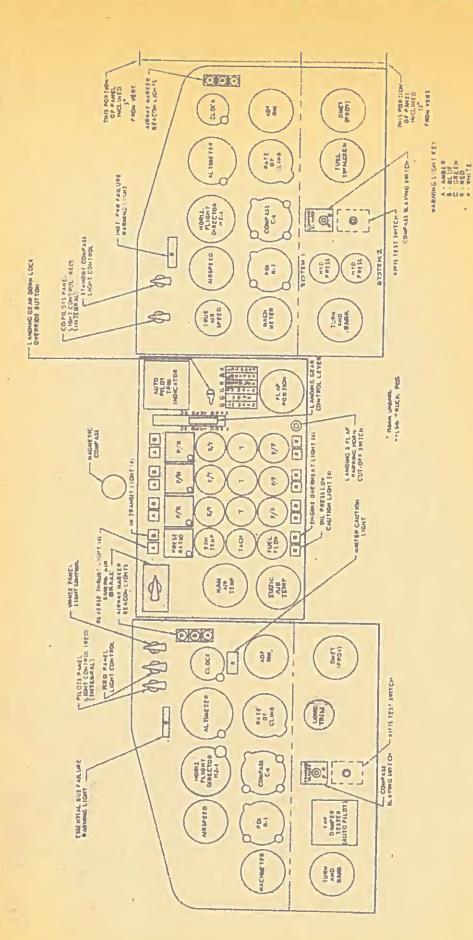
Page 62A, Figure 3.14-1 PILOT'S AND COPILOT'S INSTR. PANELS: Page 62B, Figure 3.14-2 PILOT AND COPILOT CONSOLE:

"This proposal has no effect on the specification language but relocates the Emergency Air Brake control handle from the pilot's console to the pilot's and copilot's instrument panel and rearranges various other instruments as shown in the attached revised illustrations."

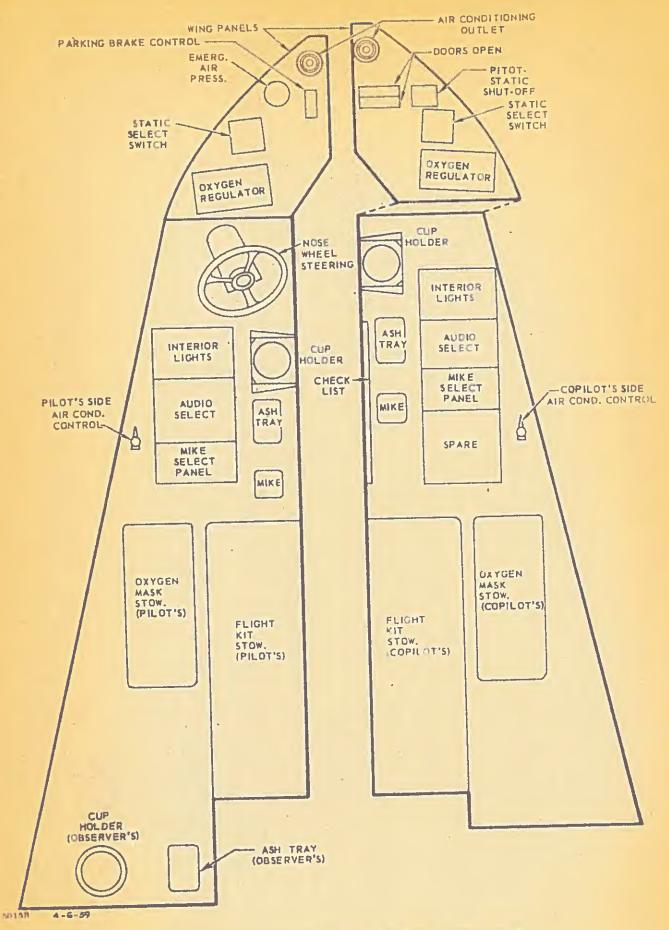
Enclosure (A) One (1) copy of the following figures:

"Figure 3.14-1 Pilot's and Copilot's Instrument Panels: Figure 3.14-2 Pilot and Copilot Console:"

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None



PILOT'S AND COPILOT'S INSTRUMENT PANELS



PILOT'S AND COPILOT'S CONSOLE AND WING PANELS
DAL

A TIVISION OF GENERAL DYNAMICS COMPORATION SAIL DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|--|-------------------------------------|----------------|---|------------------------|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,330 DTD | | |
| CHANGE NO: 224 | | | MODEL: 22-2 (Conve | ir "880") | |
| TITLE Specification Administrative Change (Oxygen System, Clarification of) | | | | | |
| ORIGIN. Convair init | lated | | | | |
| REASON FOR CHANGE: To incorporate an oxygen system revision into the specification consistent with CCP No. 138 (Cabin Interior Modification and Installation of 12-Place Club Area) | | | | | |
| EFFECT | N WEIGHT * | | EFFECT ON BA | LANCE . | |
| GUAR, WT. EMPTY O | | | 0 | INCH LB. | |
| EFFECT ON GUARANTEED P | EFFECT ON GUARANTEED PERFORMANCE. * | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | Blasin | NING APPROVAL | |
| 27 skalerbarethorense filosopare filosoparet de deservició de servició de serv | | | ENGINEER | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPL | ANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | RECUR NON-R | CT ON PRICE PER AIRPLANE RRING: ECURRING: | | |
| ACCEPTED: | | CONVA | AIR, A DIVISION OF GENERAL D | YNAMICS CORP. | |
| ВҮ | | | | | |
| DATE: | | | | my a 41 (15 minute) ha | |

Delta Air Lines Inc. Change No. 224

Title:

Specification Administrative Change (Oxygen System,

Clarification of)

Origin:

Convair initiated

Reason for Change: To incorporate an oxygen system revision into the specification consistent with CCP No. 138 (Cabin Interior Modification and Installation of 12-Place

Club Area)

Description of Change:

Page 114, Paragraph 3.19.5.4 - INDIVIDUAL OUTLETS:

REVISE the second sentence to read as follows:

"Provisions for one additional mask shall be made for each seat row in the main cabin area (three masks for each of the 19 rows on both sides of the airplane) to provide for emergency oxygen for children in arms. The oxygen outlet system for the club area shall be as shown on Figure 3.19-4".

Figure: 3.19-4 - GASEOUS OXYGEN SYSTEM:

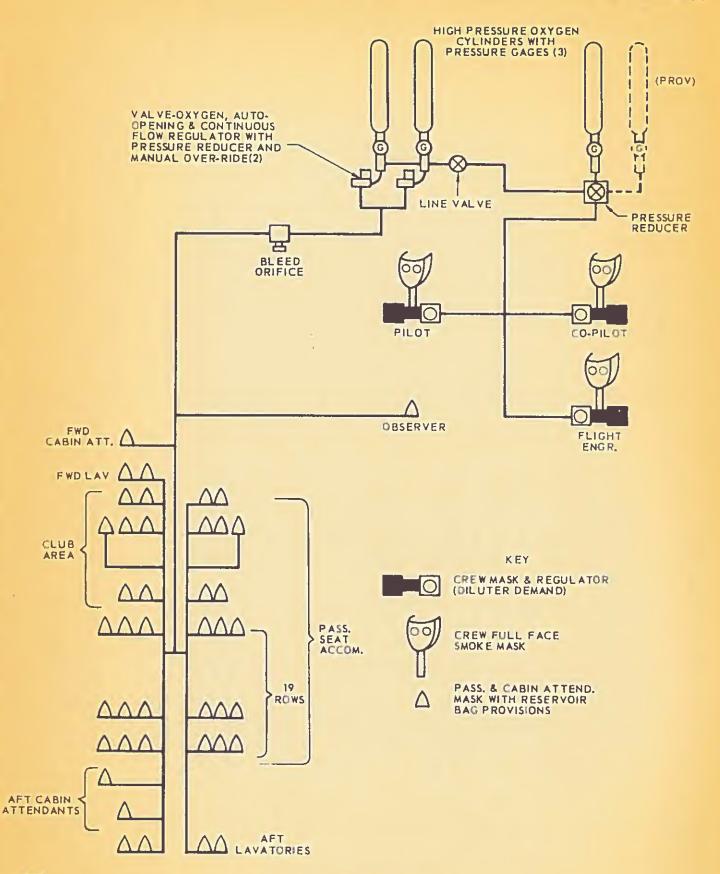
Above figure will be replaced in the specification with Enclosure (A) on Customer approval of this CCP.

Enclosure (A) One copy of Figure 3.19-4 - GASEOUS OXYGEN SYSTEM

Effect on Weight Empty: 0 Effect on Balance: 0

Effect on Performance: None

Page 115D
Report No. ZD-22-003
Model 22
Date 9-20-56
Rev. 6-9-59



A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | | |
|--|---|---|------------------------------------|-------------------|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,329 DTD | | | |
| CHANGE NO: 223 | | | MODEL: 22-2 (Convair "8 | 380") | | |
| TITLE: Specification Administrative Change (Deletion of downstream fuel screen, and clarify intent of Par. 3.12.9.9.1) | | | | | | |
| ORIGIN: Convair init | iated | | . , | | | |
| REASON FOR CHANGE: 1. | To eliminate pos to screen icing | sibil | ity of fuel flow blocker | ge due | | |
| 2. | To clarify the i 3.12.9.9.1 | ntent | of third sentence in Pa | aragraph | | |
| EFFECT | N WEIGHT * | | EFFECT ON BALANCE | E * | | |
| GUAR, WT. EMPTY | OPER, WT. EMPTY | | | | | |
| 0 | . 0 | | 0 | INCH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * Non | е | | * | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TE | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO | ENGINEERING AF | PPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | | | ANES AFFECTED: | | | |
| | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: CO | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS | CORP. | | |
| ву- | | | | | | |
| DATE: | | | Co. v. | \$117.000 (MS 17A | | |

Delta Air Lines Inc. Change No. 223

Page 1 of 1

Title: Specification Administrative Change (Deletion of downstream fuel screen, and clarify intent of Par. 3.12.9.9.17

Origin: Convair initiated

Reason for Change: 1. To eliminate possibility of fuel flow blockage due to screen icing

2. To clarify the intent of third sentence in Paragraph 3.12.9.9.1

Description of Change:

Page 52, Paragraph 3.12.9.8 - STRAINERS AND FILTERS:

Delete the first sentence which reads as follows:

"An 8-10 mesh fuel screen which can be readily drained and serviced shall be installed in the fuel supply downstream of the emergency shutoff valve connection to each engine."

Page 52, Paragraph 3.12.9.9.1 - QUANTITY GAGES:

Revise the third sentence as follows:

From: "The fuel gage units in the tanks shall be provided with disconnect plugs and receptacles and shall be designed to permit installation or replacement without special tools."

To: "The fuel gage units in the tanks shall be provided with terminal posts which shall be designed to permit installation or replacement without special tools."

Effect on Weight Empty: 0
Effect on Balance: 0
Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE: |
|--|---------------------------|-----------------|---|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,369 DTD 6 January 195 |
| CHANGE NO: 222 | | | MODEL: (880) 22-2 |
| TITLE: Brake Ove | r#eat Detectors, | Instal | |
| ORIGIN: TWA reque | sted and Convair | propos | ed for Delta |
| REASON FOR CHANGE: T | o indicate a brake | e over | heat condition. |
| | | | |
| - EFFECT C | | | EFFECT ON BALANCE * |
| GUAR. WT. EMPTY | OPER. WT. EMPTY ≠16.0 1b | | ₹9,590 INCH LB. |
| EFFECT ON GUARANTEED P | | Vone | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF THE | FUTURE CHANGE PROPOS | SAL N | ENGINEERING APPROVAL |
| LATEST DATE OF ACCEPTAN | ICE. | LUDDI | |
| | YCE: | AIRPL | ANES AFFECTED: |
| SPECIAL PROVISIONS: | | RECUR NON-RE | T ON PRICE PER AIRPLANE: RING: CURRING: |
| ACCEPTED: | | CONVA | R, A DIVISION OF GENERAL DYNAMICS CORP. |
| BY: | | | |
| DATE: | | | GON VAIRT, 5.0, 0-1217 A |

Delta Air Lines Inc. Change No. 222

Title: Brake Overheat Detectors, Installation of

TWA requested and Convair proposed for Delta Origin:

Reason for Change: To indicate a brake overheat condition.

Description of Change:

Page 35, Add the following new paragraph, after Paragraph 3.8.2.2.1:

"3.8.2.2.2 BRAKE OVERHEAT DETECTORS: A brake overheat detection system consisting of the following shall be installed:

- One heat detector element in each main and nose wheel inner axle in wheel drum area.
- Indicator warning light and test switch on fire control panel.
- Two control units in electrical rack, two control units in main wheel well and one control unit in nose section under floor.
- Two circuit breakers on circuit breaker panel.
- e. All required wiring and nameplates."

Effect on Weight Empty: \$\nu16.0 \text{ pounds}\$

Effect on Balance: \$\nu9,590 \text{ inch-pounds}\$

Effect on Performance: None

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|--|--|-----------------|---------------------|----------------------------|-----------|
| CUSTOMER: Delta Ai | ir Lines Inc. | | MCL 10.387 | DTD 25 Septem | ber 1 |
| CHANGE NO: 221A | | | MODEL: 22-2 (| (Conveir "880") | |
| TITLE: Fifth Se | eat in Cookpit, St | ructu | ral Provision | ns for | |
| | | | | | |
| ORIGIN: Delta ve | erbal request | | | | |
| REASON FOR CHANGE: C1 | ustomer request, a | nd re | vision to CCI | P No. 221 | |
| EFFECT | ON WEIGHT * | | EFFE | CT ON BALANCE * | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| +11.0 lb | +11.0 lb | | +3,190 | INCH | LB. |
| EFFECT ON GUARANTEED P | PERFORMANCE: * None | | | | |
| * NEGLIGIBLE CHANGES WIL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF T | FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPOR | AL N | | Simons ENGINEERING APPROVA | NL |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | |
| | | RECUR NON-RI | ECURRING: | AIRPLANE: | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF G | ENERAL DYNAMICS CORP. | |
| BY: | | | | | |
| DATE: | | | 1.4 | CONVAIR, s. D. | 0-1217 A |

Delta Air Lines Inc. Change No. 221A

Title: Fifth Seat in Cockpit, Structural Provisions for

Origin: Delta verbal request

Reason for Change: Customer request, and revision to CCP No. 221

Description of Change:

Page 27, Paragraph 3.7.1.3.1 - FLIGHT COMPARTMENT:

Revise the paragraph to read as follows:

"The pilots' compartment shall be arranged with the pilot on the left side, the copilot on the right side and a control pedestal between. An observer's seat shall be provided aft of the pilot. A flight engineer's station shall be provided aft of the copilot's station, and structural provisions for a fifth seat shall be made aft of the observer's seat".

Page 104, Add the following new paragraph after Paragraph 3.19.1.1.3:

"3.19.1.1.3.1 FIFTH COCKPIT SEAT: (Provisions only) Structural provisions for a fifth seat shall be made aft of the observer".

The below illustrations will be revised to show provisions for a fifth flight compartment seat, on Customer acceptance of this proposal:

- a. Figure 1-2 Standard Seating Arrangement
- b. Figure 1-3 Alternate Seating Arrangement

Effect on Weight Empty: +11.0 lbs

Effect on Balance: +3,190 inch/lbs
Effect on Performance: None Effect on Balance:

A ENVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO. ZD- 22-003 | | | DATE: | | | |
|---|---|---|---|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,389 DTD 19 February 195 | | | |
| CHANGE NO: 220 | | | MODEL: (880) 22-2 | | | |
| TITLE: Flight Re | corder, Installati | on of | | | | |
| ORIGIN: TWA requested and Convair proposed for Delta. | | | | | | |
| REASON FOR CHANGE: As | above. | | | | | |
| EFFECT (| ON WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | * | | | |
| ≠32.0 lb | ≠32.0 lb | | ≠31,680 INCH LB. | | | |
| EFFECT ON GUARANTEED F | PERFORMANCE: * None | | | | | |
| ACCEPTANCE OF THIS CH | L BE ACCUMULATED AND FUTURE CHANGE PROPOS ANGE IS DEPENDENT UPO THE FOLLOWING CHANGES: | SAL N | ENGINEERING APPROVAL | | | |
| | | T | | | | |
| LATEST DATE OF ACCEPTA | ANCE: | AIRPL | ANES AFFECTED: | | | |
| RE NO | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED: | | CONV | AIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | | |
| DATE: | and the second second | | LOS VALLATA (ACCUSA) | | | |

Delta Air Lines Inc. Change No. 220

CONVAIR: SD

Title: Flight Recorder, Installation of

Origin: TWA requested and Convair proposed for Delta

Reason for Change: As above.

Description of Change:

Page 62(cont), Paragraph 3.14.3.8 FLIGHT DATA RECORDING PROVISIONS:

Revise the paragraph title and the paragraph to read as follows:

"FLIGHT DATA RECORDER: A Lockheed Air Service Flight Recorder
No. 4001550 Model C and Amplifier No. 4001551 shall be installed,
with the necessary wiring, static and pitot lines, in the hydraulic
compartment."

Page A-7a, APPENDIX I-C, INSTRUMENTS AND RELATED EQUIPMENT:

Add the following item to the page:

"FLIGHT DATA RECORDER

Flight Recorder Lockheed Air Service 4001550 Model C

Amplifier Lockheed Air Service 4001551"

FIGURE 3.17-2, PITOT STATIC SYSTEM SCHEMATIC

Revise above illustration to show connections to Flight Recorder.

Effect on Weight Empty: #32.0 pounds

Effect on Balance: #31,680 inch-pounds

Affect on Performance: None

| SPEC NO ZD-22-003 | DATE | | | |
|---|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | MCL 10,326 DTD | | | |
| CHANCE NO: 219 | MODEL: (880) 22-2 | | | |
| Specification Administrative Change (Lavatory Toilet Water System Schematic) | | | | |
| ORIGIN: Convair initiated. | | | | |
| REASON FOR CHANGE: To provide an up to date Lavatory Toilet Water System Schematic. | | | | |
| FFFECT ON WEIGHT | EFFECT ON BALANCE | | | |
| GUAR, AT, EMPTY OPER, WT, EMPTY | | | | |
| 0 | O INCH LB. | | | |
| LEFECT ON GUARANTEED PERFORMANCE: * If one | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL BUTTANCE OF THIS CHANGE IS DEPENDENT UPON PRIDR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | | |
| | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | |
| SPECIAL PROVISIONS. | 'EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING TOTAL: | | | |
| ACCIPTEL | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| 81 | | | | |
| DATE | the second secon | | | |

Delta Air Lines Inc. Change No. 219

Title: Specification Administrative Change (Lavatory Toilet Water

System Schematic)

Urigin: Convair initiated.

Leason for Change: To provide an up to date Lavatory Toilet Water

System Schematic.

Description of Change:

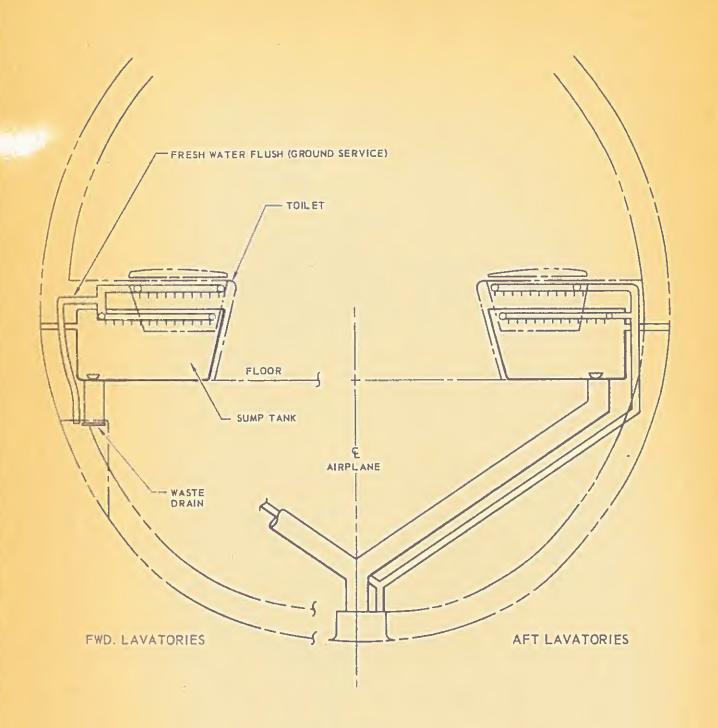
Delete FIGURE 3.19-3 - LAVATORY TOTLET WATER SYSTEM SCHEMATIC

from Specification and replace with Enclosure (A).

Inclosure: (A) One copy Page 115f - FIGURE 3.19-3 - LAVATORY TOILLT WATER SYSTEM SCHEMATIC

Effect on Weight Empty: 0 Effect on Balance: Effect on Performance: None

Page 115f
Report No. ZD-22-003
Model 22
Date 9-20-56
Rev. 1-12-59



LAVATORY TOILET WATER SYSTEM - SCHEMATIC

A 4 ISITEN OF SEMERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | DAT | E- | | | |
|--|---|-------------------|-------------------------------|--|--|
| CUSTOMER: Delta Air Lines Inc. | MER: Delta Air Lines Inc. MCL 10,3 | | | | |
| CHANGE NO. 218A | MOE | DEL: 22-2 (Conva | ir "880") | | |
| TITLE Redesign of Exterior Markings and Color Schemes | | | | | |
| ORIGIN: Verbal request by J. F. Nycum of Delta to S. J. Harris of Convair on 17 February 1959 and Delta Letter, File 142, (Nycum to Digges) dated 19 November 1959 REASON FOR CHANGE. Customer request, and revision to CCP No. 218 | | | | | |
| FFFECT ON WEIGHT . | | EFFECT ON BALANCE | | | |
| GUAR, WT. EMPTY OPER, WT. EMPTY | | | | | |
| See Weight breakdown at end of this proposal INCHLB. | | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * | | | | | |
| Nor | e | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | Bl.A. | imons | | |
| | | ENGINEER | ING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES | AFFECTED: | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | |
| ACCEPTED. | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| BY: | | | | | |
| DATE: | | | The state of the state of the | | |

CONVAIR: SD Delta Air Lines Inc.
Change No. 218A

Title: Redesign of Exterior Markings and Color Schemes

Origin: Verbal request by J. F. Nycum of Delta to S. J. Harris of Convair on 17 February 1959 and Delta Letter, File 142

(Nycum to Digges) dated 19 November 1959.

Reason for Change: Customer request and revision to CCP No. 218

Description of Change:

This portion of the proposal is applicable to Delta Airplane No. 1 and Airplanes 4 through 10, and has no effect on Specification language. The proposal consists of change to exterior markings and color schemes in accordance with Delta Exterior Marking Drawing 22-98002, revised in accordance with Delta Letter, File 142, (Nycum to Digges) dated 19 November 1959, and to specify that all exterior paint shall consist of "Epoxy" prime, Spec. 0-03021 - Type I and "Epoxy" top coat, Spec. 0-03021 - Type II.

Q.

Weight and Balance Effects for Airplane 1 and Airplanes 4 through 10.

Effect on Weight Empty: +82.0 Lbs.

Effect on Balance: +76,040 In/Lbs

Effect on Performance: None

This portion of the proposal is applicable to Delta Airplanes No. 2 and 3, which is the same as the above portion except that the upper part of the airplane will be painted with white enamel and enamel markings.

Weight and Balance Effects for Airplanes No. 2 and 3

Effect on Weight Empty: +61.0 Lbs.

Effect on Balance: +56,573 In/Lbs.

Effect on Performance: None

A DE / SION OF GENERAL DYNAMICS CORPORATION SAN DIE GO CALIFORNIA

| SPEC NO.: ZD-22-003 | | | DATE: | | |
|---|--|---|----------------------------|--|--|
| CUSTOMER: Delta Air | Lines Inc. | | MCL 10,385 DTD | | |
| CHANGE NO: 216 | | | MODEL: (880) 22-2 | | |
| TITLE: Mach and Airspeed "Never Exceed" Warning System, Installation of | | | | | |
| ONIGIN Convair initiated (Article 5, Par (e) of Purchase Agreement) | | | | | |
| FEASON FOR CHANGE: | AA requirement for | r cert | ification of the airplane. | | |
| | | | | | |
| EFFECT ON WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAF, WT. EMPTY | OPER, WT. EMPTY | | | | |
| +6.0 lbs | +6.0 lbs | | +1,803 INCH LB. | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL | | | | | |
| ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | | | |
| | | | ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPLANES AFFECTED: | | | |
| SPECIAL PROVISIONS: EFFEC | | CT ON PRICE PER AIRPLANE: | | | |
| | | RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED- | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | |
| DATE: | - Control of the Cont | | | | |

Delta Air Lines Inc. Change No. 210

Page 1 of 2

Title: Mach and Airspeed "Never Exceed" Warning System, Installation of Origin: Convair initiated (Article 5, Par (e) of Purchase Agreement)

Reason for Change: FAA requirement for certification of the airplane.

Description of Change:

Page 62 (Cont), Add following new paragraph after Paragraph 3.14.3.10:

- "3.14.3.11 MACH AND AIRSPEED WARNING SYSTEM: A Mach and indicated airspeed "NEVER EXCEED" warning system consisting of the following shall be installed:
 - a. A momentary switch on pilot's instrument panel adjacent to and outboard of the airspeed indicator. The switch shall be labeled "VNE-MNE WARN TEST."
 - b. A warning bell in the flight compartment.
 - c. One interrupter and one Mach/indicated airspeed switch in the electrical compartment area.
 - d. The necessary wiring, and a circuit breaker (emergency d-c bus) on circuit breaker panel."
- Page 62a, FIGURE 3.14-1 PILOT'S AND COPILOT'S INSTRUMENT PANELS:

 Revise above illustration to show Mach/airspeed warning test switch.
- Page 89, Paragraph 3.16.17.1 EMERGENCY POWER:

 Under "Warning" add the following item to the list:

 "8. Mach/Airspeed Warning System"
- Page 102B, FIGURE 3.17-2 PITOT STATIC SYSTEM SCHEMATIC:

 Revise above illustration to show connection for the Mach/airspeed warning system.

Delta Air Lines Inc. Change No. 210

Page 2 of 2

Page A-7a, APPENDIX I-C, INSTRUMENTS AND RELATED EQUIPMENT:

Add the following to the page:

"MACH/AIRSPEED WARNING SYSTEM

1 Warning Bell
2 Mach/Airspeed Switch
3 Interrupter
4 Radar Relay Inc.
5 168-20
7 Type 31000
7 Relay Inc.

Effect on Weight Empty: +6.0 lbs

Effect on Balance: +1,803 Inch-1bs
Effect on Performance: None

Lindred or Leville Service (1984) of the Co. Service (1984) of the Co.

| SPEC NO. 70- 22-003 | | | DATE | | |
|-------------------------------|--|--|---|--|--|
| CUSTOMER Delta Air Lines Inc. | | | WCL 10,324 DID | | |
| CHANGE NO. 215 | | | MODEL. (880) 22-2 | | |
| | tion Administratives to supports.) | e Cha | inge (Machine countersink in | | |
| ORIGIN. Convair in | nitiated. | | | | |
| REASON FOR CHANGE. | To provide an alt | ernat | te method to insure flushness. | | |
| EFFECT (| DN WEIGHT . | | EFFECT ON BALANCE | | |
| GUAR, WE, EMPTY O | OPER, WT. EMPTY | | O INCHILL. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE . None | } | | | |
| PRIOR ACCEPTANCE OF THIS CH | ETILINE LRING APPROVAL | | | | |
| LATEST DATE OF ACCEPTANCE. | | | ANES AFFECTED | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE RECURRING: NON RECURRING: TOTAL | | | |
| ACCEPTED: (19) | | | AIR, A STRISSON OF MERERAL DYNAMICS CORP. | | |
| DATE | and the second s | | Δ | | |

pelva Air illes inc. Guange Ho. 215

Specification Administrative Change (Pachine countersink in Citle:

attachments to supports.)

Origin: Convair initiated.

Meason for Change: To provide an alternate method to insure flushness.

Description of Change:

Page 31, Paragraph 3.7.1.6.5 CARGO COMPARTMENT FLOORING:

kevise the last sentence as follows:

"Attachments to transverse or lengitudinal supports shall From:

employ extra depth dimples to insure flushness."

"Attachments to transverse or longitudinal supports shall employ extra depth dimples or machine countersinking to To:

insure flushness."

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|--|--------------------|---|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,388 DTD 18 February 19 | | |
| CHANGE NO: 214 | | | MODEL: (880) 22-2 | | |
| TITLE: Crew Memb | er Facilities at 0 | bserv | er's Station, Installation of | | |
| ORIGIN Delta verbal request to S. J. HARRIS of Convair. | | | | | |
| REASON FOR CHANGE: | Customer request. | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE * | | |
| GUAR. WT. EMPTY | OPER. WT. EMPTY | | ≠1,818 INCH LB. | | |
| EFFECT ON GUARANTEED F | PERFORMANCE: * | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPOPPRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | | | |
| | | | ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTA | NCE: | AIRPL | ANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| COCCEPTED. | | CONYA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | | |
| DATE: | | | TONVAIR, S.D. 6-1217 A | | |

Delta Air Lines Inc. Change No. 214

Page 1 of 2

Title: Crew Member Facilities at Observer's Station, Installation of

Origin: Delta verbal request to S. J. HARRIS of Convair.

Reason for Change: Customer request.

Description of Change:

Page 99, Paragraph 3.17.2.3.5 SERVICE INTERPHONE:

Add the below sentence after the sentence which reads as follows:

"The chime and light installed at the flight deck also shall be activated from the nose wheel well, ground power plug, tail cone and main gear area.":

"An ON/OFF switch and microphone jack shall be installed at observer's station on left hand console."

Page 110, Paragraph 3.19.2.8.12 COFFEE CONTAINERS:

Revise the sentence as follows:

From: "Individual coffee cup holders shall be provided for each crew member except observer."

To: "Individual coffee cup holders shall be provided for each crew member and the observer."

Page 114, Paragraph 3.19.5.5 MASKS:

Revise the paragraph to read as follows:

"Provisions shall be made for stowing three crew supplemental masks and one observer's supplemental mask in the flight station. Provisions shall be made for stowing passenger supplemental masks where one will be accessible for installation and use by each passenger within 15 seconds. The flight crew and observer system shall be so arranged that the masks can be continuously plugged in and available for immediate use. Oxygen outlets shall be located at the flight crew and observer's stations, and at all passenger seats and cabin attendants' stations as shown on Figure 3.19-4. Two oxygen outlets shall be provided in each lavatory. The flight crew outlets shall be provided with a tee valve to allow installation of two masks at each station. A "Scottoramic" protective mask shall be installed and connected to one side of the tee outlet at each flight crew station. A supplemental mask shall be provided for each cockpit station (including observer's station) and shall be stowed accessible to the station with the occupant of the station in his normal seated position. Passenger masks shall be of the disposable type."

Pelta Air Lines Inc. Change No. 214

Page 2 of 2

Pa e 115D, FIGURE 3.19-4 GASEOUS OXYGEN SYSTEM:

Above figure will be revised to include observer in crew oxygen supply system, less smoke mask.

Page A-15, APPENDIX I-C, OXYGEN EQUIPMENT:

Change the below item in the Description List as follows:

From: "3 Regulators (Crew diluterdemand-type)"

"4 Regulators (Crew observer To: 14950-8" diluter-demand-type) Ard Equipt.

Add the following item to the Description List:

"4 Oxygen Mask Assembly A-14" (Crew and observer supplemental) Scott

Effect on Weight Empty: +7.0 pounds Effect on Balance: +1,818 inch-pounds Effect on Performance: None

The following shall not appear in the Specification language:

The effect of CCP No. 184A (specifying two oxygen outlets in each lavatory) is included in this proposal.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|---|--------------------------|-----------------|---|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10.378 DTD 27 January 195 | | |
| CHANGE NO: 213 | | | MODEL: (860) 22-2 | | |
| TITLE Potable Water System Drain Fitting, Airterra, Installation of | | | | | |
| ORIGIN: WA reque | sted and Convair | propo | sed for Delta | | |
| REASON FOR CHANGE: As | above | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE | | |
| GUAR. WT. EMPTY ≠1.0 1b | OPER. WT, EMPTY ≠1.0 1b | | Negligibl W CH LB. | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * None | | | | |
| * NEGLIGIBLE CHANGES WILL TOTALS REFLECTED IN A ACCEPTANCE OF THIS CHAPRIOR ACCEPTANCE OF T | ENGINEERING APPROVAL | | | | |
| LATEST DATE OF ACCEPTANCE: | | | ANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | RECUR NON-RE | T ON PRICE PER AIRPLANE: RING: ECURRING: | | |
| | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY: | | | | | |
| DATE: | | | MINTER STATE | | |

CONVALA: SD

Delta Ar Lines Inc. Change No. 213

Title: Potable Water System Drain Fitting. Airterra. Installation of

Origin: Twa requested and Convair proposed for Delta

leason for Change: As above

Toscription of Change:

Page 136 (Cont), Paragraph 3.19.2.1.4 WATER SYSTEM:

Revise the third sentence as follows:

rom: "The system shall provide for draining on the ground."

"The system shall provide for draining on the ground through 400 a flush-t/pe fitting equipped with a hose attachment for drain line."

Page 1158. FTGURE 3.19-2 WATER SYSTEM:

Above illustration will be revised to show flush, hose attachment for drain line.

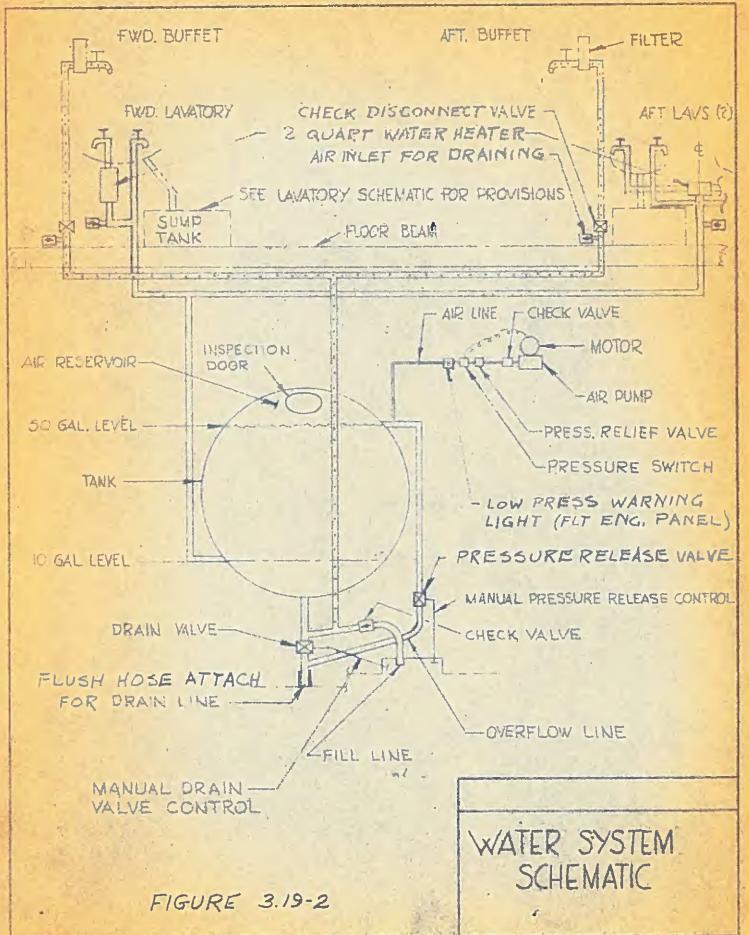
Marclesure: (A) One copy Figure 3.19-2 WATER SYSTEM SCHEMATIC (for information only)

ffect on Weight Empty: #1.0 pound ffect on Balance: Effect on Performance: Negligible

None

ANALYSES PREPARED BY CHECKED BY THE REVISED BY

PAGE //5B REPORT NO. 2D-22-003 EAL. DATE 2 - 20-58



A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIE GO, CALIFORNIA

| 3PEC NO.: ZD- 22-003 | | | DATE | | | |
|--|-------------------|-----------------|--|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,323 DTD | | | |
| CHANGE NO: 212 | | | MODEL: (880) 22-2 | | | |
| Specification Administrative Change (Clarification of Specification language in Paragraph 3.17.3.1.1). | | | | | | |
| ORIGIN Convair initiated. | | | | | | |
| REASON FOR CHANGE: TO | clarify the inter | nt of | the Specification. | | | |
| | | | | | | |
| FFFECT C | N WEIGHT * | | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | | |
| 0 | 0 | | O INCH LB. | | | |
| EFFECT ON GUARANTEED P | ERFORMANCE: * | Non | 3 | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPOPPRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | ENGINEERING APPROVAL | | | |
| LATEST DATE OF ACCEPTANCE. | | | ANES AFFECTED: | | | |
| SPECIAL PROVISIONS | | RECUR NON-RE | T ON PRICE PER AIRPLANE: RING: ECURRING: | | | |
| ACCEPTED: | | CONVA | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| вү | | | | | | |
| DATE | | | ○ N → 13_10W | | | |

Delta Air Lines Inc. Change No. 212

CONVAID: SD

N + P All

Title: Specification Administrative Change (Clarification of Speci-

fication language in Paragraph 3.17.3.1.1).

Grigin: Convair initiated.

Reason for Change: To clarify the intent of the Specification.

pescription of Change:

Page 100, Paragraph 3.17.3.1.1 ANTENNAS:

Revise the second sentence as follows:

From: "Two flush type antennas shall be located in the underside

of the wing in the trailing edge."

To: "Two flush-type antennas shall be located on the top of the

fuselage as shown on Figure 3.17-3."

A DÍVISION OF GENERAL DYNAMICS COMPONATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | | DATE: | | |
|---|-------------------|----------------------------------|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,371 DTD 13 January 1959 | | |
| CHANGE NO: 211 | | | MODEL: (880) 22-2 | | |
| TITLE: Dual ATC | Transponder, Prov | rision | s for | | |
| ORIGIN: Verbal request of C. J. May of Delta on 12 January 1959 | | | | | |
| REASON FOR CHANGE: Cu | stomer request | | | | |
| | | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALANCE * | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 | 0 | | O INCH LB. | | |
| EFFECT ON GUARANTEED F | PERFORMANCE: * |)e | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSA ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | 4 | | |
| | | | ENGINEERING APPROVAL | | |
| LATEST DATE OF ACCEPTANCE: | | AIRPL | ANES AFFECTED: | | |
| SPECIAL PROVISIONS: | | | EFFECT ON PRICE PER AIRPLANE: | | |
| • | | RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: | | | IR, A DIVISION OF GENERAL DYNAMICS CORP. | | |
| BY:* | | | | | |
| DATE: | | | CON VAIR, 3, - 1, 6-1217 A | | |
| | | | | | |

Delta Air Lines Inc. Change No. 211

CONVAIR: SD

Title: Dual ATC Transponder, Provisions For

Origin: Verbal request of C. J. May of Delta on 12 January 1959

Reason for Change: Customer request

Description of Change:

This proposal has no effect on Specification language and consists only of changing the provisions for a Dual ATC Transponder Beacon System from "Collins 621A-1" to "Wilcox 714B".

A DIVISION OF GENERAL DYNAMICS COPPORATION SAN LIF GO, CALIFORNIA

| SPEC NO.: ZD- 22-003 | | DATE: | | | |
|--|------------------------|---|--|--|--|
| CUSTOMER: Delta Air Lines Inc. | | MCL 10,322 DTD | | | |
| CHANGE NO: 210C | | MODEL: 22-2 (Convair "880") | | | |
| TITLE Specification Administrative Change (Incorporation of Indicator Light List) | | | | | |
| ORIGIN: Detail Spec | cification Requirement | ents, and R.F.C. No. 3.16-36 | | | |
| REASON FOR CHANGE: Revision to CCP No. 210A, and to include the effects of CCP No. 210B. | | | | | |
| EFFECT | ON WEIGHT . | EFFECT ON BALANCE * | | | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 | 0 | O INCH LB. | | | |
| EFFECT ON GUARANTEED F | ERFORMANCE: * None | | | | |
| | FUTURE CHANGE PROPOSAL | Officering Approval | | | |
| LATEST DATE OF ACCEPTANCE: | | IRPLANES AFFECTED: | | | |
| SPECIAL PROVISIONS: | | FFECT ON PRICE PER AIRPLANE: ECURRING: ON-RECURRING: OTAL: | | | |
| ACCEPTED: | | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | |
| BY: | | | | | |
| DATE | | FR VALUE OF MALIE | | | |

Page 1 of 3

Title: Specification Administrative Change (Incorporation of indicator

light list)

Origin: Detail Specification Requirement, and R.F.C. No. 3-16-36

Reason for Change: Revision to CCP No. 210A, and to include the effects

of CCP No. 210B.

Description of Change:

Page 81, Paragraph 3.16.11.3 INDICATOR LIGHTS:

Delete the following from the end of paragraph:

"(Reference Figure 3.16-)"

Page 81, Add the following paragraph after paragraph 3.16.11.3:

"3.16.11.3.1 INDICATOR LIGHT LIST: The following indicator lights shall be installed:

| Quan negd | Description | Color | Cap Dim- ming | Elec- trical Dim- ming |
|----------------------------|---|--|---------------------|---|
| | FLIGHT ENGINEER'S STATION | | | |
| 62404422111111121212114184 | Trans. Pump Low Press. (Fuel Sys) Booster Pump Low Press. (Fuel Sys) Valve Open (Fuel Sys) Valve in Transit (Fuel Sys) Emergency Valve Closed (Fuel Sys) High-Low Pressure (Hyd. Sys) Supply Pressure Low (Hyd. Sys) Overspeed Trip (Freon Comp) Low Air Flow (Air Conditioning) L.H. Freon Fail (Air Conditioning) R.H. Freon Fail (Air Conditioning) High Altitude (Cabin Pressure) Fwd Fail (Air Conditioning) Aft Fail (Air Conditioning) Bus Off (D-C Power) Charger Relay Open (D-C Power) Bus Off (A-C Power) Main Out (A-C Power) Standby Out (A-C Power) Conn. (A-C Power) Conn. Open (A-C Power) Gen. Off (A-C Power) | Amber Red Blue Green Amber | | X X X X X X X X X X X X X X X X X X X |

Delta Air Lines Inc. Change No. 2100

Page 2 of 3

| Quan Read | Description | Color | Cap Dim- mins | |
|------------------------------|--|--|---------------------|--|
| 1. 1(D 1(D | Gen. Overheat (A-C Power) Low Water Pressure ual)Main Door Forward Main Door Aft ual)Service Door Forward Service Door Aft ual)Cargo Door Forward Cargo Door Aft ual)Elec.Compt. Door Hyd. Compt. Door L.H. Landing Gear Safety Pin H.H.Landing Gear Safety Pin Nose Landing Gear Safety Pin | Amber | | X X X X X X X X X |
| | PILOTS' INSTRUMENT PA | <u>NEL</u> | | |
| 4() 1 1 1 1 1 | Essential Bus Failure Airway (Marker Beacon) Outer (Marker Beacon) Middle (Marker Beacon) Autopilot Trim Ind. "AP OFF" Autopilot Trim "Glide Path Armed" Autopilot Trim "Auto Trim Off" Dual) Reverse Thrust-In Transit Dual) (Oil Pressure Low (Engine Overheat Landing Gear Door Open L.G. Truck Position Gear Unsafe R.H. Main Gear Down and Locked L.H. Main Gear Down and Locked Instrument Power Failure Master Caution "Press to Test" Yaw Damper Test, "HOLD" Yaw Damper Test, "READY" | Red White Blue Amber Red Amber Amber Amber-Blue Red Red Red Red Red Red Red Red Red Re | X X X | X X X X X X X X X X X X |
| | PILOTS' OVERHEAD PA | MEL | | |
| 1 1 2 2 2 | Stewardess Call Stewardess Call Switch Rainclear "ON" Pitot Heaters "ON" L.H. and R.H. Landing Lights Ext. | White Hed Blue Blue Amber | | X X X X |

Delta Air Lines Inc. Change No. 2100

Page 3 of 3

| 4 | Description Engine Anti-Ice "CLOSED" Engine Bleed Air "CLOSED" High Duct Pressure Excess Heat (Anti-Ice Structure) | Color Amber Amber Red | Cap Dim- ming | X X X |
|-------------|--|--|---------------------|---------------------------------|
| 41111222151 | Ice Signal Warning Anti-Ice "ON" Anti-Ice, Closed Inboard Anti-Ice, Closed Center Anti-Ice, Closed Outboard Malfunct Tail Excess Heat Anti-Ice and Isolation Push for PA | Red Red Blue Amber Amber Amber Amber Amber Amber Red Amber | | X X X X X X X |
| | FORWARD PEDESTAL | | | |
| 1 | Mose Landing Gear, Anti Skid, Inoperative Main Landing Gear, Anti Skid, Inoperative | Amber Amber | | X X |
| | PILOTS * GLARE SHIELD | | | |
| 2 (D | Fire Control Switch Warning Lights ual) Agent Out (Fire Extinguishing Sys) | Red Red | | X |
| | AFT PEDESTAL | | | |
| 1 | Public Address "PUSH" | Amber | | XII |

Page 82, Delete paragraph number, RFC number and all reference to indicator lamps from page.

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DICEGO, CALIFORNIA

| SPEC NO.: 20- 22-003 | | | DATE | | |
|--|---------------------|---|---------------------------------|----------------------|--|
| CUSTOMER: Delta Air Lines Inc. | | | MCL 10,320 DTD | | |
| CHANGE NO: 209 | | | MODEL: (880) 22-2 | | |
| TITLE Specification Administrative Change (Change jack pad adapters from AAF to MS-type) | | | | | |
| ORIGIN: Convair init | iated | | | | |
| REASON FOR CHANGE: AAF Drawing No. H41B1287, for external fuselage and wing jack pad adapters, is obsolete and has been replaced by MS-33559. | | | | | |
| EFFECT | ON WEIGHT * | | EFFECT ON BALA | NCE * | |
| GUAR, WT. EMPTY | OPER. WT. EMPTY | | | | |
| 0 | 0 | | 0 | INCH LB. | |
| EFFECT ON GUARANTEED F | PERFORMANCE: * None | | | | |
| NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSAL ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPON PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | | | ENGINEERING | G APPROVAL | |
| LATEST DATE OF ACCEPTANCE: | | AIRPL | ANES AFFECTED: | | |
| | | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | |
| ACCEPTED: CON | | CONVA | AIR, A DIVISION OF GENERAL DYNA | MIGS CORP. | |
| BY, | | | | | |
| DATE: | | | | OUVATIA, J.D. OAZ ZA | |

Delta Air Lines Inc. Change No. 209

Title: Specification Administrative Change (Change jack pad adapters

from AAF to MS-type)

Origin: Convair initiated

Reason for change: AAF Drawing No. H41B1287, for external fuselage and

wing jack pad adapters, is obsolete and has been

replaced by MS-33559.

Description of Change:

Page 123, Paragraph 3.22.2 JACKING PROVISIONS:

Revise the last sentence as follows:

From: "External fuselage and wing jack pads shall incorporate an AAF Type fitting, on mating surface to ground jack assembly".

To: "External fuselage and wing jack pad adapters shall conform to MS-33559-Type II on mating surface to ground jack assembly".

A DIVISION OF GENERAL DYNAMICS CORPORATION SAN DIEGO, CALIFORNIA

| SPEC NO.: ZD-22-003 | DATE: | | | | | |
|--|---|--|--|--|--|--|
| CUSTOMER Delta Air Lines Inc. | MCL 10,370 DTD 7 January 1959 | | | | | |
| CHANGE NO: 208 | MODEL: (880) 22-2 | | | | | |
| TITLE: Inertia Reels and Harnesses, Aerotherm, Installation of | | | | | | |
| ORIGIN Delta Telecon, May to Harris | , on 6 January 1959 | | | | | |
| REASON FOR CHANGE: Customer request | | | | | | |
| EFFECT ON WEIGHT * | EFFECT ON BALANCE * | | | | | |
| GUAR. WT. EMPTY Proposal "A" O Proposal "B" /3.01b Proposal "B" /3. | Proposal "A" 0 Inch-Lb Proposal "B" #2,556 INCH LB. | | | | | |
| EFFECT ON GUARANTEED PERFORMANCE: * None | | | | | | |
| * NEGLIGIBLE CHANGES WILL BE ACCUMULATED AND TOTALS REFLECTED IN A FUTURE CHANGE PROPOSE ACCEPTANCE OF THIS CHANGE IS DEPENDENT UPO PRIOR ACCEPTANCE OF THE FOLLOWING CHANGES: | SAL N | | | | | |
| LATEST DATE OF ACCEPTANCE: | AIRPLANES AFFECTED: | | | | | |
| SPECIAL PROVISIONS: | EFFECT ON PRICE PER AIRPLANE: RECURRING: NON-RECURRING: TOTAL: | | | | | |
| ACCEPTED: BY: | CONVAIR, A DIVISION OF GENERAL DYNAMICS CORP. | | | | | |
| DATE: | TO IVALLE GARAGE | | | | | |

Delta Air Lines Inc. Change No. 208

Page 1 of 2

Title: Inertia Reels and Harnesses, Aerotherm, Installation of

Origin: Delta Telecon, May to Harris, on 6 January 1959

Reason for Change: Customer request

Description of Change:

PROPOSAL "A"

Page A-12, APPENDIX I-C, FURNISHINGS:

Change the seventh and eighth items in the Description List as follows:

From: "2 Pilots' Safety Belts and Shoulder Harnesses

1 Flight Engineer's Safety Belt and Shoulder Harness"

To: "2 Pilots' Safety Belts

l Flight Engineer's Safety Belt"

Change the ninth item in the Description List as follows:

From: "3 Inertia Reels (Pilot,

Copilot and Flight Engineer)"

To: "3 Inertia Reels and Harnesses Aircraft Aerotherm (Pilot, Copilot and Flight Mechanics Model 95"

Engineer) Inc.

TENGRET PRINTER VINERICS C POTRA (III)

MAN CIT | A LIF MAN'A

| SPEC NO. ZD- 22-003 | | | DATE: | | | | |
|--|---|--------------------|--------------------------------------|--|--|--|--|
| CUSTOMER Delta Ai | r Lines Inc. | | MCL 10.317 DTD | | | | |
| CHANGE NO. 200 | | _ | MODEL (880)22-2 | | | | |
| flight company | n Administrative rtment) | Change | (provide assist ropes in | | | | |
| GRIGIN Convair intit | JRIGIN Convair initiated | | | | | | |
| REASON FOR CHANGE | To clarify the | intent | of the Specification | | | | |
| FFFECT | ON WEIGHT * | | E P P C Y C | | | | |
| FUAR. AT. EMPTY | OPER. WT. EMPTY | | EFFECT ON BALANCE | | | | |
| 0 . | 0 | | O INCH LB. | | | | |
| L F F E C T ON GUARANTE E D P | | | | | | | |
| TOTALS REFLECTED IN A F | BE ACCUMULATED AN JTURE CHANGE PROPO | D DSAL | | | | | |
| ACCEPTANCE OF THIS CHA PRIOR ACCEPTANCE OF TH | NGE IS DEPENDENT UP TE FOLLOWING CHANGE: | DIN S | | | | | |
| - on the standard or one of the standard standard standard standard standard standard standard or one of the standard standard or one of the standard standa | the first recommendation recommendation and the department of the state of the process. | | ENGINEERING APPROVAL | | | | |
| ATEST DATE OF ACCEPTANCE: | | | IES AFFECTED | | | | |
| PECIAL PROVISIONS | | | TAL DELICE DEED ANDER | | | | |
| RECURI NON-RE | | RECURRING NON-RECU | ON PRICE PER AIRPLANE NG. JRRING | | | | |
| CCFPTE1: | | | | | | | |
| | | CONTAIN. | A DIVISION OF GENERAL DYNAMICS CORP. | | | | |
| | | | | | | | |
| b age man | | | | | | | |